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Generic Goal System

Content, Structure and Determinants of Goals at the Generic Level of Consumer Behaviour

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Generic Goal System:

Content, Structure and Determinants of Goals
at the Generic Level of Consumer Behaviour

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Chapter 1

The generic level of consumer behaviour



1.1. What is the generic level of consumer behaviour?

Supposed you had unexpectedly received some money, for instance a gift or a lottery prize. What would you like to do with the money? Why is this action of much importance to you? This is a simple illustration of the generic level of consumer decision making, henceforth the generic level. Of course neither money nor unexpectedness defines the generic level. Although there are plenty of examples of receiving a windfall, gifts and lottery prizes being two of them, the generic level also concerns situations when expectations rule. For example, people may expect to receive a bumper bonus, an extra profit, a tax return, gain excessive money from a previous budget, or even to inherit some valuable assets from their beloved parents. To a certain degree, people in such situations must ponder of the different ways to utilize the money. The defining features of the generic level concern the mental processes of decision making in which an individual is trying to allocate a consumer resource into different categories of activities (Van Veldhoven & Groenland, 1993).

Consumer resources also concern time. The generic level of decision making also takes place when one is having a free time, either expectedly or unexpectedly. Examples include situations such as being stranded at a strange place due to travel chaos, cancellation of a planned appointment, or free time due to earlier accomplishment of a job. One is likely to think over alternative ways of using the time, such as reading a book, window shopping, listening to favourite music, working with a notebook, or having a chat over the internet. A particularly common situation is retirement, both voluntary and involuntary retirement due to work lay off (Van Solinge, 2006). One may opt an extended summer holiday, learn a new skill, or take on a new life project such as writing a book. Such

choices can be characterized in terms of utilitarian and hedonic or experiential values (e.g., Dhar & Wertenbroch, 2000).

It may sound strange, but having social power appears to incite problems of sorts, in the generic level. A newly installed politician at a public office knows this well as he or she must decide on different ways of using public assets. Being the leader of a peer group, be it at a kindergarten or a university student club, confronts one with similar kinds of problems. Parents certainly have constant problems allocating time for different sorts of children activities; whether more tennis or music, play time, or taking extra lessons. A particular interest of the generic level concerns the immediate versus long-term consequences of the alternative activities.

Life transitions often force people to make some generic level decisions. Take divorce as an example. Direct consequences of a divorce settlement may include changes in the amount of income, place of residence, social identity, and daily chores (Poortman, 2002). A divorce settlement often requires the divorcee to redefine life, such as whether to get married again or whether to venture a work or career (Hetherington & Kelly, 2002), and decide what lifestyle or standard of living are acceptable, and even friendship and personal network to maintain (Terhell, 2003). Decision making at a life transition represents a strategic type of the generic level of consumer decision making. It involves choices between different types of life themes and values (e.g., Huffman, Ratneshwar & Mick, 2000).

The aforementioned situations occur at the individual level. But, life transition may occur at a mass-scale, such as in the aftermath of a major natural disaster. Large scale disasters, such as the 26th December 2004 tsunami, left the survivors unwillingly to redefine their life. Imagine the thoughts emerging within one who had just lost his wife, children and most of his family members, house and almost everything he/she had ever owned, as well as the place and tools to work. A man who I happened to encounter in Aceh, Indonesia, 11 days after the tsunami simply stated, "I don't know what I am going to do with my life." This expresses a sense of loss for one's life goals, experienced by many of the survivors, synonymous to a loss in one's meaning of life (Carballo, Heal & Horbaty, 2006) at a mass scale. Goals at the most general level can be equated to a generic goal. It concerns major categories of desired end states of one's life, and may thus constitute the meaning of life itself.

In short, the generic level concerns all types of consumer resources, namely money, effort, social power, and time, including the live-time of the consumer itself. It occurs at the individual as well as at the societal levels. The mental processes are articulated when an individual is deliberating choices of activities related to a resource. The objective of the decision making is to optimize the utility

or benefit for the short- and long-term interests of the consumer. The higher the value of the resources concerned, the higher the involvement in the processes of decision making. At a certain level, these processes may require one to look inward deeply, to search one's soul, to examine faiths and fundamental values, and to contemplate what life means to the consumer.

1.2. What is this study about?

The generic level may involve every type of consumer resources; it may be evident in many important contexts of consumer behaviour. But this study is focused on consumer resources at the most simplest form, namely the windfall income. Windfall money is not received regularly, and most of it concerns a one-off income. It is plausible to assume that a windfall income provides an opportunity for improving one's level of consumption, especially when it concerns a substantial amount of money. As described above, the deliberation processes of decision making may involve considerations of various aspects of the consumer's life. Therefore a study into the mental processes of decision making regarding a windfall income may reveal significant psychological and economic aspects of consumer behaviour.

In addition, alternative choices in a windfall situation are well-defined. Windfall money can only be spent or saved (Keynes, 1936/1964). Nevertheless, theories suggest different explanations regarding consumer behaviour in this context. For example, the life-cycle theory (Modigliani & Brumberg, 1954) and the permanent income theory (Friedman, 1957) assert that there is little change in consumption of windfall or transitory income, unless the amount is very significant such as winning the national lottery. In contrast, the behaviour life-cycle theory (Shefrin & Thaler, 1988) suggests that, as a consequence of the mental accounting processes, a windfall income would significantly affect the current level of consumption. More on this issue will be discussed in section 1.4. It is sufficient at this point to conclude that, albeit its simplicity, an economic psychological study into the generic level of decision making regarding windfall income may offer significant contributions in theories of consumer behaviour.

1.3. How the generic level relates to other aspects of consumer behaviour?

A generic level of consumer behaviour can be distinguished from the other levels of consumer decision-making, namely specific allocation and modal allocation levels of consumer behaviour (Antonides & Van Raaij, 1998; Van Veldhoven & Groenland, 1993). The specific allocation level of consumer behaviour concerns problems of choice between brands and brand types of a product or service.

The modal allocation level takes place when decisions within the product domain are concerned. For example, consumers may consider whether to save a windfall income in a certificate of deposit or to invest in a venture capital. At the generic allocation level, decisions between major categories of budgets, namely saving and spending, are the primary concerns for the consumer.

The specific, modal, and generic level all contributes to the welfare of the individual. In particular, the generic level of consumer decision making has strategic consequences. According to Thaler (1985), saving and spending represents the most important types of economic behaviour of individuals and households. Considering that decisions regarding saving and spending are taken at the generic level, many aspects of the consumers' life are highly influenced by the processes of decision making at the generic level. For example, financial security or vulnerability of individual consumers and households are likely to be a consequence of past decision making processes at the generic level. This implies that high quality generic level decision making will significantly contribute to the well-being of individual consumers and households. The following are two cases that illustrate the strategic importance of the generic level:

"Michael Carroll won £9.7 million in the National Lottery in 2002. Immediately he bought four homes, a holiday villa in Spain, two convertible BMWs, two Mercedes-Benz cars, a stake in a beloved football club, spent "untold thousands" on alcohol and drugs, wears a very large amount of gold jewellery. Eighteen months after winning the lottery, all of the fortune had been spent on this extravagant life, and now he is nearly broke" (Wikipedia)

"Brad Duke, 34, pocketed a lump sum of \$85 million after winning a \$220 million Powerball jackpot in 2005. He spent the first month of his new life assembling a team of financial advisors. The portfolio he has built: \$45 million in municipal bonds, \$35 million on oil and gas stocks and real estate, \$18,000 repayment on student loan, \$125,000 paying off mortgage. He also set \$1.3 million family foundation. He spent \$63,000 on a trip to Tahiti with 17 friends, \$12,000 annual gift to each of his family members, and \$14,500 on a hobby car. Eighteen months after winning his fortune, he is on course of his goal: to become a billionaire in 10 years" (CNN Money).

Scientific examination to the lottery winning phenomena are reported in Nissle and Bschor (2002), and Gardner and Oswald (2001).

Not only is this an important problem, the generic level of consumer behaviour is also a common problem. For some time now, empirical studies have revealed individual differences in the propensity to save (Wärneryd, 1999). Whereas some people routinely put aside a certain portion of their income, others fail to do so, on a regular basis, and the rest is never saving. Even among those who regularly save, many are doing so for amounts that are too small or in times that are

too late. A survey shows that when people get older, they usually regret their lower savings: 60 per cent wish they had saved more when they were younger (BMRB International, 1994). In retrospect, older people often regretted their late start on pension savings (Prudential UK, 1996). As evident in the survey, 42% of the respondents agreed to the statement: "I wish I had considered my pension arrangement earlier." This is at odds with the common belief in many cultural settings that saving is considered a virtue (Lea, Tarpy, & Webley, 1987), as well as the answers of most people that they would like to save their money (Wärneryd, 1999). However, this observation fits with an assertion made by Katona (1975, p. 235), that is, "plans to save often represent good intentions that are not carried out at a later date."

Saving is not only a problem at the individual or household level. At the macroeconomic level, low saving rates have become problems in many developed countries. For example, the Financial Research Survey (1996) reports that 26 percent of the UK labour force has no saving or financial investment at all. Of it, 22 and 21 percent are among those aged 45-54 and 55-64 years, respectively. Thirty three per cent of the former group and 26% of the latter have less than £500 in their current saving and investment accounts. Furthermore, 40 percent of working adults inadequately contribute to their pension. Should these current trends continue, it will pay out less than 40 per cent of their final salary.

Under-saving represents another side of consumer problems, namely over spending. It has become both individual and societal problems (e.g., Schor, 2000). Various explanations have been offered. Among others, the urge to conspicuous consumption, an explanation offered by Thorsten Veblen dated back to the late 19th century (Veblen, 1899/2000). Another explanation is concerned with the desire to keep up with the Jones's (Duesenberry, 1949). With the advent of the new era of consumerism, mediated by the high penetration of television, it causes the up-scaling of consumer aspirations, spending, and norms (e.g., Schor, 2000).

Both facets of the problem may originate at the generic level of consumer behaviour. That is, the failure to identify goals that include needs and wants at present time and in the future, and the failure to budget current and future income accordingly. Another problem is concerned with the failure of self-control with regard to prior budget commitment (Shefrin & Thaler, 1988). Self-control is often discussed outside the area of the generic level of consumer behaviour. However, there is no point in self-control if there is no prior budget commitment, which is conceptually determined at the generic level. Moreover, self-control may increase or decrease with the clarity of budget commitment (Baumeister, Heather-ton, & Tice, 1994).

Toward this end, studying the generic level of consumer behaviour is relevant to economic psychology, government policy, and everyday practice. For the economic psychologist, the study may advance knowledge of consumer behaviour. For consumers, it is a way to understand their behaviour as well as a means to improve the direction towards a more goal-directed behaviour. To policy makers, it may increase the accuracy of welfare policy and planning. This is important in the context of problems regarding household saving in many developed economies. To marketers, it is relevant for marketing products in the strategic domain of consumer behaviour.

1.4. Theoretical approaches

The generic level of consumer behaviour involves saving and spending. In terms of behavioural and psychological processes, a generic level involves decision-making processes along with the sub-processes such as information search, deliberation, and judgment (Baron, 2000). Along the processes, different facets of the self of the decision maker are involved. Hence, three theoretical approaches are relevant to the analysis of the generic level of consumer behaviour, namely economic, behavioural, and psychological approaches. Differences between these approaches have been a subject of discussion (e.g., Hogarth & Reder, 1986; Earl, 1990; Lopes, 1994; Lunt, 1996; Van Raaij, 1999; Wärneryd, 1999). Perspectives of each of the approaches will be summarized in the following three sections.

1.4.1. Economic approach

A generic allocation problem is at the heart of the economic discipline. It is defined as a study regarding how an economy or individual chooses to allocate scarce resources to different uses and over time (Samuelson & Nordhaus, 1992). The objective of an economic study is to make predictions and to provide recommendations. The fundamental assumption is that economic agents (individuals, firms, or nations) are rational and act rationally. It means they attempt to maximize their utilities or profits from the way they allocate their resources. Furthermore, interactions between rational agents with rational expectations create a market that enforces agents to behave rationally. Market forces will eliminate irrational agents through processes of profit taking by rational agents. Thus, the theory assumes perfect competition on the side of the market. These two assumptions are obviously very strong and it is unlikely that they withstand empirical examination. Nevertheless, they may serve useful analytical objectives (Kirzner, 1997). It does not matter whether the assumption does not correspond to reality, as long as the theory provides useful predictions. Friedman (1953) suggests an eloquent analogy of economic theory to an expert billiard player. In his words:

“It seems not at all unreasonable that excellent predictions would be yielded by the hypothesis that the billiard player made his shots as if he knew the complicated mathematical formulas that would give the optimum directions of travel, could estimate accurately by eye the angles, etc., could make lightning calculations from the formulas, and could then make the balls travel in the direction indicated by the formulas.” (p. 21).

In reality it is obvious that very few expert billiard players, if any at all, are well versed with mathematics and physics to match their expertise. It is not necessary to master mathematics and physics in order to become an expert billiard player, as it is not necessarily true that every economic agent is indeed perfectly rational and every market is perfectly competitive. Rationality and market competition are approximations for the way economic agents are interacting and market mechanisms are developing.

The rational behaviour of the economic agent is the cornerstone of micro-economic theory. A rational agent has stable preferences. It means, among others, that preferences are relatively stable over time, and that emotional and contextual factors do not influence preferences. Another assumption is that immediate consumption of a resource is preferred to delayed consumption or saving. However, it is also accepted that the satisfaction an agent obtains from consumption at one time is dependent on consumption at the previous time. The law of diminishing marginal utility of consumption states that the satisfaction one obtains from every additional unit is diminishing. The second glass of coke is less satisfying than the first, and the third is less than the second glass. Thus, the law dictates that after certain level of consumption is reached, a further unit of consumption cannot provide significant satisfaction. This principle can be applied to explain generic allocation problems of consumer behaviour. Consumer resources will be saved when consumption out of it has reached its optimum utility.

The principle may be extended to include inter-temporal concerns of consumption. Maximum utility can be obtained by distributing consumption of a resource over a period of time. A unit of consumption gives higher level of satisfaction after a certain period of time, as compared to the consumption of the same unit right after previous consumption. Thus, a rational consumer is assumed to weigh the marginal utility derived from consumption now to that of the future. Saving is a mechanism to smoothen consumption over time, so as to maximize utility over the period. Important theories in applying this principle are the life-cycle theory (Modigliani & Brumberg, 1954; Modigliani, 1986) and permanent income theory (Friedman, 1957). The gist of these theories is illustrated eloquently in Thaler (1994):

“How much should ... a person consume in a given year? The answer is this: in any year, compute the present value of financial wealth, including current income, net assets, and the expected value of future income; figure out the level annuity that could be purchased with that money; then consume the amount that would be received from such an annuity” (pp. 107-108).

From this brief overview, it can be concluded that economic theories focus on prediction and prescription. The theoretical approach is based on assumption of rationality of the economic agent. Although the assumption has been defended as acquiring descriptive power, it is more appropriately conceived as a normative assumption (e.g., Thaler, 1980). A highly relevant assumption to the generic allocation level of consumer behaviour is that consumption is preferred to saving. Thus, saving is what is left over from consumption (Lea, Tarpy, & Webley, 1987). This definition signifies the residual nature of saving, against which Katona (1975) shows other types of saving, namely discretionary and contractual savings. Moreover, extensive empirical studies have consistently identified several saving motives, namely precautionary, transactional, speculative, retirement, and *inter vivo* and bequest saving motives (Katona, 1975; Nyhus, 2002). Within the policy domain, the primary saving models (e.g., the life-cycle model, the precautionary savings model, the bequest motive model) have not been successful in explaining why so many elderly reach retirement with little or no savings (Gustman & Juster, 1996; Poterba, 1996).

1.4.2. Behavioural approach

Alternative approaches to mainstream economic theories are offered in the behavioural theories of consumer choice. An enriched model was developed by Shefrin and Thaler (1988) and was called the Behavioural Life Cycle Hypothesis (BLCH). The model includes the notion of self-control (Thaler & Shefrin, 1981), mental accounting (Thaler, 1980, 1985, 1999), and framing effects (Tversky & Kahneman, 1981, 1986; Kahneman & Tversky, 1984). Contrary to mainstream economic theory, behavioural economics assumes that self-control is the fundamental problem of an economic agent (Thaler, 2000; Jolls, Sunstein, & Thaler, 1998; Barberis & Thaler, 2003). A strategy for overcoming self-control is to adopt mental accounting, that is, a set of cognitive operations used by individual consumers and households to organize, evaluate, and keep track of financial expenditures (Thaler, 1999). An important mental accounting practice in financial behaviour is that income and wealth are organized in separate mental accounts that implies differential marginal propensity to consume different sizes of income, namely current income account, current asset accounts, and future income account (Shefrin & Thaler, 1988). The behavioural approach to consumer behaviour assumes fundamental problems in terms of bounded rationality, bounded

willpower, and bounded self-control (Mulainathan & Thaler, 2000; Thaler, 2000; Jolls, Sunstein, & Thaler, 1998).

In mental accounting, expenditures are grouped into categories (housing, food, clothing, etc.). Similarly, wealth is assigned in one of the three mental accounts, namely current income account, current asset account, and future income account. Expenditures are financed from money drawn from corresponding accounts. For example, money deducted from current income account is for spending on food and entertainment, whereas home improvement is financed from current asset accounts. Each mental account is associated with a different propensity to save and to spend. Specifically, the current income is almost completely spent whereas future income is not at all consumed. The marginal propensity to consume (MPC) current assets is in between the MPC of current income and the MPC of future income.

Mental accounting also implies that money is not fungible. That is, money in a mental account is not a perfect substitute for money in another mental account (Thaler, 1999). Henderson and Peterson (1992) offer a cognitive psychological interpretation of mental accounting. They argue that the framing processes underlying mental accounting are the same as the processes described in categorization, schema, and script theories. Thus they suggest the use of existing theories when attempting to explain mental accounting processes.

Another important feature of the BLCH concerns modelling consumer efforts for establishing self-control. The model is based on the assumption of two competing functions in the consumer, namely the *planner* and the *doer* (Thaler & Shefrin, 1981). The *planner* is always trying to secure long-term interest of the consumer, whilst the *doer* is pathologically myopic. The latter tempts consumers to spend income as soon as possible. Exercising control over the power of the *doer* is assumed to require willpower effort, which implies negative utility for the consumer. Mental accounting is viewed as a way for exercising self-control. In addition, pre-commitment devices such as a contractual obligation to save, similar as the notion of contractual saving (Katona, 1975), are viewed as devices to help exercise self-control.

The BLCH claims to be able to predict consumer behaviour regarding pensions and saving, and the effect of transitory income (Shefrin & Thaler, 1998). In comparison to standard economic theory, BLCH claims superiority in explaining two anomalies regarding consumption. The first anomaly concerns the robust observation that consumption is excessively sensitive to income. The second anomaly concerns the non-fungibility of various forms of wealth (Thaler, 1994), as described briefly in the preceding paragraph. BLCH commands strong implication for policies. For example, changes from the procedure of opt-in to opt-out in

the pension scheme offered to the employees, as recommended by BLCH, have increased participations in pension plan, a claim having already been substantiated (Thaler & Bernartzi, 2004). Subsequently, recommendations based on BLCH have been applied to national pension policies in several developed countries, such as the USA, the UK, and New Zealand (The Economist, 2005).

Although the behavioural approach to consumer behaviour adopts more realistic assumptions regarding human behaviour, the focus of the research remains the same as mainstream economics, namely prediction. Contrary to the mainstream theories, BLCH reflects the limitations of human capacities, particularly with regards to problems of self-control, and are thus substantially closer to capturing the reality in consumer behaviour. Nevertheless, it is taken for granted that individuals assign their income and wealth into a number of budgets. Questions such as how budget categories are formed, for what purpose, where the purposes come from, and how the source of a purpose may affect the ability to self-control, are not addressed in BLCH. For this, we may say that the theory has missed another quality of human being, namely the capacity for self-regulation (Bandura, 2001). Further Bandura (2001) argues that the unparalleled success of human beings in evolutionary history did not materialize without the capacity for self-regulation of human thought and action. It is plausible to assume that consumer behaviour is self-regulated, especially at the generic level when a consumer is considering ways of utilizing resources at his or her disposal.

1.4.3. Psychological approach

Psychological research is concerned with describing the behaviour and the processes underlying the behaviour. Theories are developed on the basis of empirical observations through various experimental and survey methods. The theories accommodate several factors, namely internal factors (i.e., personality, motivation, attitude), psychological processes (i.e., cognitive and affective processes), and external factors (i.e., stimuli, context) in the explanation of the behaviour.

One of major theoretical approach in psychology is the social cognitive theory. The most complete version of the theory was introduced by Bandura (1986). Among others, the theory assumes the capacity of human agency. It reflects the essence of being human as the capacity to exercise control over the nature and quality of one's life. These capacities are achieved through functional capabilities of human agency, namely intentionality, forethought, self-reactiveness, and self-reflectiveness. These capacities enable human being to self-regulate their behaviour.

According to Vohs and Baumeister (2004), self-regulation is the capacity of individuals to guide themselves, in any way possible, toward important goal

states. It refers to the executive and controlling aspects of the self. Self-regulatory mechanisms determine how an individual actively attempts to construct and modify his or her own thoughts, feelings, and behaviour and also to influence and change the environment (Kunda, 1999). It refers to purposive behaviours in which the individual performs self-corrective adjustments when necessary, in order to stay on track for whatever purpose is under pursuit, for which the corrective adjustments originate from within the system (Carver, 2003). Thus a self-regulatory mechanism reflects regulation *by* the self, not just regulation *of* the self (Vohs & Baumeister, 2004), and reflects the proactive qualities of mind (Caprara & Cervone, 2000, p. 49), or a voluntary action management (Karoly, 1993). It works through conscious and unconscious processes. Thus, self-regulation provides a framework on how the self is put together in behaviour in many contexts of human life.

Many theories of self-regulation have been proposed. There are theories that specifically address the basic processes of self-regulation (e.g., Carver & Scheier, 1981; Mischel & Ayduk, 2004; Higgins & Spiegel, 2004; Cervone, 2004), aspects of self-regulation processes (e.g., Banfield et al., 2004), developments of individual's capacity for self-regulation (Vohs & Ciarocco, 2004), interpersonal components of self-regulation (Leary, 2004), and individual differences in self-regulation (Barkley, 2004). In applied settings, consequences of self-regulation have been studied quite extensively in areas such as addictive behaviour (Bechara, 2006; Sayette, 2006; Hull & Slone, 2006) and consumer behaviour (Faber & Vohs, 2004). Albeit such diversities, there are two basic properties shared by all theories of self-regulation (Cameron & Leventhal, 2003). The first concerns the construal of self-regulation as a dynamic motivational system of setting goals, developing and enacting strategies to achieve those goals, appraising progress, and revising goals and strategies accordingly. The other property relates to the management of emotional responses as crucial elements of the motivational system.

The cybernetic control theory (Carver & Scheier, 1981; Scheier & Carver, 1988; Carver, 2004) provides a succinct explanation of the dynamic motivational setting. The theory views individuals' behaviours as a continuous process of movement toward (and sometimes away from) goals. The self-regulatory mechanisms ensure that feedback loops are present in the continuous movement. A feedback loop consists of four components, namely input function, reference value (goals, standards), comparator, and output function (Carver, 2004). The process is analogous to the mechanism of a thermostat: sensors detect the temperature of the room (input function), the comparator compares the measured temperature with the predetermined (goals, standard) desired temperature, the heating or cooling mechanism is activated (output function). Figure 1.1 summarises the theory in the context of generic level of consumer behaviour.

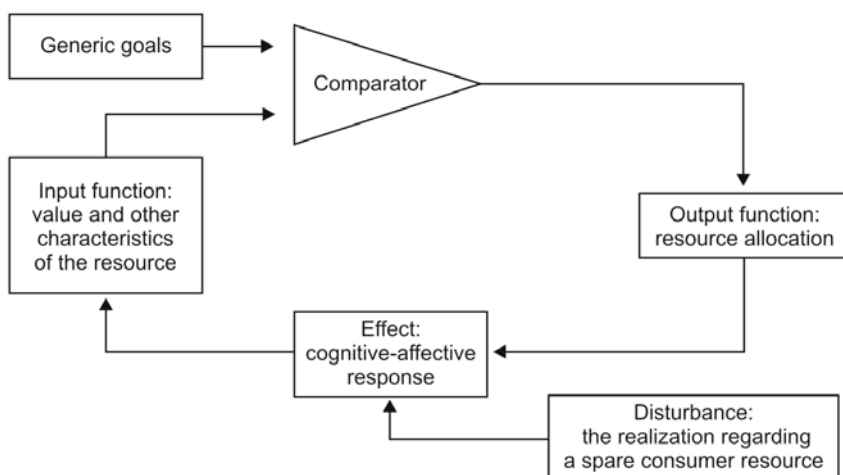


Figure 1.1. Schematic depiction of a feedback loop of a cybernetic control in a generic allocation situation of consumer behavior (adapted from Carver, 2004, p. 14).

It is obvious that goals are primary components of self-regulatory mechanisms. Fisbach, Dhar and Zhang (2006) state that setting goals and monitoring progress towards goal achievement are fundamental to theories of self-regulation. Goals concerns any type of desired states that individuals possess, such as personal striving (Emmons, 1989), possible selves (Markus & Nurius, 1986), and self-guide (Higgins, 1987, 1996). Goals can be understood from its conceptual construction, i.e., structural properties, goal processes, and goal contents (Austin & Vancouver, 1996; Pervin, 1989; Kruglanski et al., 2002). The functions of goals are to energize and direct behaviour (Kruglanski et al., 2002). Besides, in the self-regulation mechanisms, goals serve as reference values in feedback loops.

Toward this end, a self-regulation approach requires a generic goal system as a property of the consumer decision making at the generic allocation level. Built on the goal system theory (Kruglanski et al., 2002), a generic goal system consists of desired states that are relevant, and associative networks between goals. The associative networks between goals explain the hierarchical structure of goal systems (Kruglanski et al., 2002), and the means-end framework of goal-pursuit behaviour (K.G. Grunert & S.C. Grunert, 1995). Based on Austin and Vancouver (1996), and Bagozzi, Bergami and Leone (2003), generic goals are inherent in the self-regulatory mechanisms of the consumer, and simply lying dormant until they are made salient by relevant stimuli.

The self-regulatory mechanism in the context of generic decision making regarding a windfall income can be explained as follows. The presence of windfall income enlightens the consumer on opportunities of achieving goals. The

self-regulation processes starts with the comparison between the characteristics of the windfall income, i.e., the size and the source (Henderson & Peterson, 1992), and the state of goals that become active. Decisions regarding allocations of the money into generic-level budgets, i.e., spending and saving, follow from the comparison processes. The mental accounting processes of the decision making (Thaler, 1980, 1985, 1999) implies that there are differences in the marginal propensity to consume the same amount of incomes but of different characteristics of sources. Thus a self-regulation approach predicts different behaviours of a windfall income as compared to the economic approach, and different explanations of the same types of behaviour as compared to the behavioural approach. In addition, the self-regulatory approach focuses on the explanation of processes, whereas the economic and behavioural approaches focus on the outcome of behaviour. Generic goal systems constitute one of the psychological constructs in the self-regulation of consumer behaviour at the generic level.

1.5. The present research

This study adopts the social cognitive approach to consumer behaviour at the generic level. The preceding section concludes with a hypothetical generic goal system as a necessary psychological construct in consumer behaviours at this level. This hypothesis reflects a top-down view, i.e., consumer behaviours are goal-driven (e.g., Paulssen & Bagozzi, 2005; Park & Smith, 1989; Bettman, Luce, & Payne, 1998), in contrast to the bottom-up view, i.e., consumer behaviours are product-driven (e.g., Johnson, 1984, 1988). To the best of our knowledge, there is no effort yet at examining what goals constitute a generic goal system, how these goals are organized, and how generic goal systems explain differences in consumer behaviour at the generic level. This study represents an attempt in the direction of eliciting, constructing, and applying the generic goal systems in the explanation of consumer decision making at the generic level. The specific research questions can be described as follow.

What is the appropriate method and procedure for eliciting generic goals and its organizational properties?

The first issue that this thesis will address is concerned with methods for the elicitation of generic goal systems. As discussed above, a generic goal system comprises multiple goal contents that are organized in certain ways. In addition, there might be individual differences in the generic goal systems. Differences between individuals may be characterized in terms of different contents of the generic goal system, or it might be in terms of different organization of the same goal contents, or a combination of content and organization of the generic goal

system. Following on this rationale, a focus on eliciting the subject's goals and how these goals are interrelated are more appropriate for the purposes of this study, rather than focusing on measuring how strongly the subjects are committed to certain goals. Whereas goal elicitation implies an idiographic approach, which is more suitable for tapping into a subjective construct, such as consumer goal systems, measurements using psychological scales are more appropriate for testing a hypothesis concerning a predetermined psychological construct (Gravetter & Forzano, 2006).

Among the goal elicitation methods, the laddering technique has gained wide acceptance as a method that satisfies such a requirement. Other methods include projective techniques (McClelland, 1961; Malhotra & Peterson, 2006). Several variations in the laddering technique have been developed, such as the laddering technique for eliciting the means-end chain of consumer consumption (Reynolds & Gutman, 1988), for eliciting superordinate goals (Pieters, Baumgartner, & Allen, 1995; Bagozzi, Bergami, & Leone, 2003), and for eliciting personal values in organizational contexts (Bourne & Jenkins, 2005). However, these methods were designed for eliciting consumer goal systems at more specific levels. For example, the means-end chain model is concerned with goals in the context of choice between brands in a product category. On the other hand, the superordinate goal laddering procedure is concerned with specific focal goals that may signify choices between modal behaviours. A generic allocational context involves categories of consumer behaviour such as spending, saving, investing, and repaying debt. The question this study attempts to answer is what specific aspects of the laddering procedure are required for eliciting generic goals and its organizational properties.

What are the generic goals and how are they organized?

By definition, a generic goal system includes all goals that become salient in a generic level of consumer decision making. This may include goals as broad as maximizing utility as assumed in economic theories. More specifically, goals of enjoying stable levels of consumption, as postulated in the life-cycle (Modigliani & Brumberg, 1954) and the permanent income theories (Friedman, 1957), are likely to be part of the generic goal systems. In addition, included in the generic goal systems are specific motives such as keeping with referent persons in terms of possessions and lifestyle, a phenomenon which is often addressed as the tendency to keep up with the Jones's (Duesenberry, 1949; Schor, 2000). Different types of saving motives such as explained in Keynes (1936/1964), Browning and Lusardi (1996), and Katona (1975) also appear to fit in the generic goal system. Goals at the generic level may represent what consumers express as needs, wants, desires, motives, and values (e.g., Belk, Ger, & Askegaard, 2000; Rokeach, 1973;

Schiffman & Kanuk, 2004; Maslow, 1954), especially with regard to consumption motives. The problem this study attempts to address is how these goals are organized in the generic goal systems.

Research demonstrates that individuals have to spend higher efforts when multiple goals are salient at the same time (Bettman, Luce, & Payne, 1998). The relationships between the salient goals can be characterized in terms of either substitutive, complementary, or competing (Kruglanski et al., 2002). Higher cognitive-motivational processing is required when multiple goals are incompatible to each other (Jain & Maheswaran, 2000). In this regard, saving and spending goals are naturally competing (Katona, 1975), since what is saved cannot be spent, and vice versa. Because the generic level of consumer behaviour involves spending and saving goals (Van Veldhoven & Groenland, 1993; Antonides & Van Raaij, 1998), and because goal organization facilitates individual functioning in the context of the salience of multiple goals (Kruglanski et al., 2002), this study assumes that goals at the generic level are structured in certain fashion. The problem this study is focused on is how generic consumer goals are organized, what are the organizational properties, and to which degrees are generic goals independent and interdependent of each other.

What factors determine the formation of generic goal systems?

Evidence of individual differences in consumer behaviour is paramount. Almost every handbook in consumer behaviour, e.g., Antonides and Van Raaij (1998), Assael (1992), Schiffman and Kanuk (2004), spent a chapter on the topic of individual differences. In the financial domain, Wärneryd (1999) describe consumers of the same income levels, life-cycle stages, and demographic backgrounds as often different to each other with regards to their wealth and financial preparedness in retirement. Wealth and pensions are the direct results of retirement planning (Selnow, 2004), which involves decision makings at the generic level. Given that consumer decision making is goal-driven (Van Oesselaer, 2006), we should expect that individual differences in the wealth and pension levels are influenced by differences in the generic goal systems. The question this research would like to answer is what are the psychological and demographic factors that determine differences in the generic goal systems of individuals?

1.6. Overview of the thesis

The remaining chapters of this dissertation are organized as follows. Chapter 2 presents a theoretical review on the construct of goals in consumer behaviour. Goal constructs are discussed in terms of goal structures, goal processes, and goal contents. First of all, a framework which integrates goal-setting and

goal-pursuit is discussed. Then, theories regarding the organization of consumer goals are examined. An extensive coverage of literature on goal contents of consumer behaviour is presented, which includes motivational constructs of need, want, desire, motive, and value. The contents of consumer goals are also discussed in terms of thematic goals and goal orientations. Issues pertaining to the assessment of consumer goals close the theoretical review. The chapter is concluded with a discussion regarding the implications of the goal constructs for the present studies. More specifically, the final section of this chapter examines how the measurement method for this research has to be designed, how the organizations of the contents of the elicited generic goals have to be inferred, and how individual differences in the generic goal systems have to be examined.

Chapter 3 elaborate three components of this dissertation, namely research approach, data collection, and the empirical data. Elaborations on the research approach are emphasized on methodological considerations of research into the constructs of consumer goals. The major research methods are reviewed; its implications on the research problems are discussed. The methodological section is followed by the section describing the data collection processes and the social-economic background of the population. Finally, empirical data that will be analyzed in the remaining chapters are summarized.

Chapter 4 is concerned with the development of a generic goal laddering procedure. First of all, three versions of the laddering technique are reviewed. Further, a theoretical framework for the goal elicitation procedure at the generic allocation level is proposed. Built on these, a context-based goal-laddering procedure that is suitable for a generic allocation level of consumer behaviour is developed. Finally, analysis to the empirical data are presented and subsequently discussed.

In Chapter 5, the hierarchical structures of generic allocation goals are examined based on the existing literature. Empirical data are analysed to identify the structural properties of generic goal systems, such as the degree of abstractness, prominence indices, instrumentality, multifinality, and equifinality. The construct validity of the generic goal system is examined in terms of nomological validity, that is, the relationship of generic goal system with a related construct that has been previously proven. In this study we relate generic goal systems with consumer confidence.

Chapter 6 examines the functional relationship between the competing motives in the generic goal systems. In particular is the relationship between saving and spending goal systems. Two possible types of relationships are examined, namely independency and interdependency. Descriptive and analytical analyses are performed. The results of this study are expected to shed some light in un-

derstanding the nature of conflicts between saving and spending motives. Potential applications including the methodology of measuring saving and spending motives in a panel survey study.

Chapter 7 is concerned with explaining differences between women and men in terms of generic goal systems. Gender differences in economic behaviour are potentially fundamental issues in economic theory and economic modelling. In the theories and in building models, economists assume that people are homogenous or that people concerned are drawn from a common distribution. Proving that there are indeed substantial differences between men and women would imply that the theory and model may predict behaviour and output inaccurately. Besides examining the determinants of differences in generic goal systems, this chapter attempts to contribute an explanation regarding the intervening variable in the gender-based differences in economic behaviours.

Chapter 8 reports the application of the generic goal laddering procedure in relation to the consumer confidence indexes. The indexes, which capture psychological variables, has been hailed as the major contribution of psychology in predicting and explaining the dynamics and the output of the economy at the macro level. Periodic publications of the major indexes draw huge attention from the mass media. Nevertheless, economists are still debating the informational content of the indexes. Two views are paramount, whether the indexes simply capture the opinion of the informants, or its capture public sentiment that will affect economic decisions, in terms of saving and spending of the household. The chapter attempts to contribute in terms of relating optimism and pessimism, as measured at the individual level through the survey questions, to generic goal systems.

Finally, Chapter 9 summarizes the major findings of this study. The focal point of this chapter is whether the construct of generic goal system can be established. In addition, the functional relationships between motives of the generic goal system are highlighted. The potential approach in understanding individual differences in a generic goal system is also an important point of this chapter. The highlight on the generic goal laddering procedure completes the summary of the research findings. Above all of these findings, implications and potential applications of this study are discussed.



Chapter 2

Goal constructs in consumer behaviour



What goals become active in the generic level of consumer behaviour? How do these goals relate to each other? How are they organized in the mental system of the individual? As apparent from Chapter 1, the economic, behavioural and psychological approaches offer different accounts regarding the generic goals and its organization. The objective of this chapter is to review research and literature of consumer behaviour that are relevant to the questions above, and will provide frameworks for the empirical examinations.

2.1. Goals in consumer behaviour research

Goals are important constructs in consumer behaviour research, as apparent in the volumes of Ratneshwar, Mick, and Huffman (2000), and Ratneshwar and Mick (2005). Besides, goals are also studied extensively from the perspectives of cognition, motivation, personality, and social psychology. A general consensus across these areas is that goals concern internal representations of desired states (e.g., Austin & Vancouver, 1996; Bandura, 2001; Pervin, 1989; Schiffman & Kanuk, 2004; Van Osselaer et al., 2005; Bagozzi & Dholakia, 1999). Desired states in a goal-pursuit behaviour may include outcomes, benefits, or consequences of the act, events of the goal-pursuit itself, and processes of engagement in the goal pursuit (Austin & Vancouver, 1996).

Included in the goal construct are intentions to realize the desired states (Antonides & Van Raaij, 1998), levels of self-efficacy (Bandura, 1986), and performance proficiencies that one wishes to attain (Latham & Locke, 2006). Goals can naturally be distinguished from fantasies and personal standards (Caprara & Cervone, 2000). A goal requires a minimum degree of commitment for accomplishment, which is absent in such fantasies as becoming a pop star. Goals can be distinguished from personal standards in the sense that people may have a

high standard on a certain performance, but nevertheless in a particular situation one may set a lower goal. The process by which goals are formed in the context of goal-pursuit behaviour is called goal-setting (Higgins, 1997, 1998; Latham & Locke, 1991; Oettingen, Pak, & Schnetter, 2001; Oettingen & Gollwitzer, 2003).

Goals have been studied in many areas of consumer behaviour. For example, research has been done on the importance of goals in the purchases of durables (Katona, 1975), and in the marketing of nondurables, services, and ideas or persons (Bagozzi & Dholakia, 1999). Situational and personal goals, and goal orientations have been studied in relation to category representations (e.g., Barsalou, 1991; Ratneshwar, Barsalou, Pechman, & Moore, 2001), judgment of store reputation (Lee & Shavitt, 2006), product evaluation (Chernev, 2004), consumers' experience (Novak, Hoffman, & Duhachek, 2003), perception of salesperson influence strategies (Mallalieu, 2006), and preference for the status quo (Chernev, 2004). However, these research programs were mostly concerned with consumer behaviour at the more specific levels, namely consumer behaviour in the contexts of products, brands, or product categories choices. To the best of our knowledge, there is little attention paid in the goal constructs of consumer behaviour at the generic level, if any at all.

2.2. Goal setting in the context of goal pursuit behaviour

Several questions arise regarding the processes by which goals are formed and represented in the processing systems of consumer behaviour. An important part concerns the processes by which intentions to pursue goals are formed. From a self-regulatory perspective, the question concerns the way goal-driven actions are initiated and evaluated, and how outcomes, consequences, or benefits of the act are evaluated. Finally, questions can be addressed at the ways in which goal-pursuit processes are monitored, and how outcome evaluations provide feedbacks in the subsequent processes of goal-pursuit behaviour. Bagozzi and Bergami (1999) offer a goal-setting and goal-pursuit framework that comprehensively addresses these concerns, Figure 2.1. An alternative view is offered in Huffman, Ratneshwar, and Mick (2000), which will be discussed in section 2.4.4.

With regard to goal setting, goals might be latent in the cognitive-affective system of the consumer, it might be "sold" to a consumer by persuasion of advertising or peers (Austin & Vancouver, 1996), or it might be constructed by the consumer in the decision-making situation (Bettman, Luce, & Payne, 1998). Therefore a goal setting, or goal establishment in Austin and Vancouver (1996), involves a decision-making process in which the task of the consumer is to select goal content and develop its dimensions. It concerns the question of "What are the goals I can pursue, and why do I want or not want to pursue them?" In the

generic level, a goal setting process may become active because of an external stimulus that presents opportunities or imposes imperatives. An important case of external stimulus is concerned with income change, be it an increase or decrease. Increase of income presents opportunities, whereas decrease of income presents imperatives and limitations. Consequently people are more willing to spend on durables when they perceive there are increases in the income, and more cautious when they perceive decreases (Katona, 1975). Income changes provide either opportunities or impose imperatives.

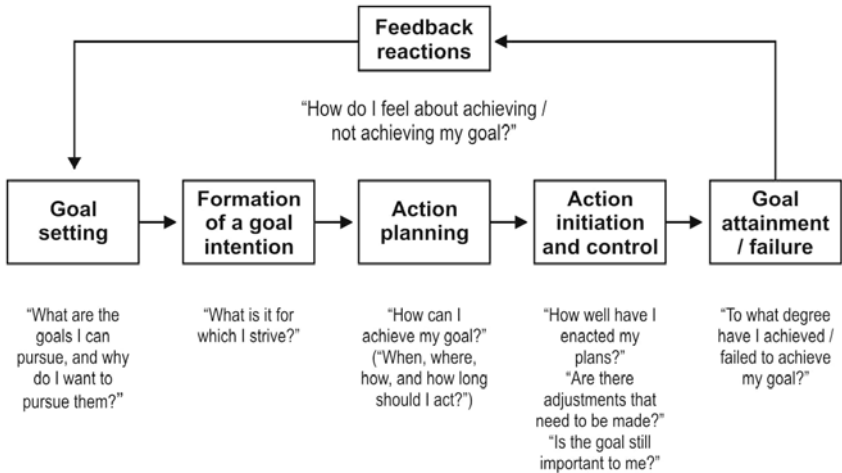


Figure 2.1. Goal setting and goal pursuit (Bagozzi & Dholakia, 1999, p. 20)

Apart from external factors, Bagozzi and Dholakia (1999) also mention internal conditions as a factor of goal setting. It concerns with such situations as when the consumer constructs a goal schema or chooses from among self-generated alternatives. The hierarchy of needs (Maslow, 1954) demonstrates the influence of internal conditions in goal setting. The deprivation of biological needs makes goals such as the provision of food, rest or sex salient. The same mechanism explains goal setting processes concerning the other levels of human needs, such as the deprivation of safety needs when biological needs are fulfilled, and the deprivation of belongingness and love when biological, physiological, and safety needs are satisfied. More on the hierarchy of needs will be discussed in section 2.3.1.

The activation of a goal makes the discrepancy between the actual and the desired states becomes more transparent (e.g., Higgins, 1987; Pham & Higgins, 2005). Self-discrepancies between an actual and a desired state affect on the emotional state of the individual. For example, a discrepancy between actual state and what people perceive as their obligations or responsibilities is associated with

the vulnerability to agitation-related emotions, such as fear, worry, and tensions (Higgins, Bond, Klein, & Strauman, 1986; Higgins, 1989). Naturally people strive to bring their current actual state into line with related end state they value. Thus, the goal serves as a motivational factor in goal pursuit (Higgins, 1989; Kruglanski et al., 2002).

Goal pursuits are activated in one of three ways (Bagozzi & Dholakia, 1999). The first way concerns automatic processes, where consumer behaviours are not preceded by a deliberate process of goal setting and goal pursuit. Automatic goal pursuits may be implicit in habitual goal-directed consumer behaviour. Nevertheless, they argue that an automatic process may originate in a prior deliberative processing, or learning shaped by classical or operant conditioning. This notion is supported in Oettingen et al. (2006), which assume goals are mental representations that can be activated by features of the contexts in which those goals have been pursued regularly and consistently in the past. A different way to explain automatic process is offered by Austin and Vancouver (1996), which conceives goals as inherent and simply lying dormant, waiting for activation. Thus, goal-setting processes can be conceived as either a change in difficulty level from zero, a change in importance level from zero, an increase in activation strength in a network, or a conversion of a need into a goal. Oettingen et al. (2006) illustrates this process as follows. If a person is accustomed to use parties as a way to make impressions on people, the goals of impressing others will become automatically active upon entering a party. Once activated in the non-conscious manner, in other words the activation strength has been increased from zero, Oettingen et al. explains that the mental representation of the goal would operate in the same way as when it is consciously activated.

The second way pertains to impulsive acts. These involve some awakening of a need or desire that quickly becomes a goal to be achieved through minimal goal-directed activities. Such goals arise automatically because of biological, emotional, moral, or ethical forces. These goals are non-conscious, but they are not necessarily produced by habitually learned responses to environment, such as in the auto-motive model (Bargh, 1990). Other sources are goal pursuits that were previously withdrawn or interrupted. Moskowitz, Li, and Kirk (2004) explain how preconscious cognitive processes implement goal pursuit despite the conscious withdrawal from the current goal pursuit. Such implicit volitional processes correspond with the so-called *Zeigarnik effect* in which the cognitive system continues to engage in goal-relevant processes despite the fact that they have been consciously disrupted (Zeigarnik, 1927).

Finally, consumer behaviours are volitional acts. These pertain to the processes of consumer behaviour through goal intention. "What is it for which I

strive?” Goal intentions can be characterized as either as specific acts as end performances (“I intend to buy a Sony DVD player tonight”) or as particular outcomes to be achieved through the execution of an instrumental act (“I intend to lose two kilograms”). Volitional processes are also concerned with implementation intention, in which some conditional intention is stated. That is, a consumer may intend to perform a goal-directed behaviour (e.g., execute an instrumental act) given that future contingencies occur. “I intend to do X when situation Y is encountered.”

Figure 2.1 also summarises the goal-pursuit behaviours, with feedback loops to goal setting. In action planning, the consumer elaborates further on the deliberative volitional process. “How can I achieve my goal?” It concerns with when, where, how, and how long should the consumer commit the act. The next stage of consumer goal pursuit behaviour is action initiation and control, in which the act of pursuing the goal is evaluated and adjustment to the course of goal pursuit is made. The outcome of the behaviour is evaluated in the next stage, i.e., to what degree has the consumer achieved or failed to achieve his or her goals. How the consumer feels as a consequence of attainment or failure in the goal pursuit becomes the feedback reaction to the further goal setting processes in similar situations.

2.3. Organization of consumer goals

Consumers live with a great number of goals that they want or feel compelled to fulfil. To be able to function effectively, multiple goals must be organized in certain fashion (Richins, 2005). Most of the recent theoretical conceptions regarding the organization of consumer goals have been developed from cognitive psychology. In this approach, goals are related to knowledge structure. Following Barsalou (1991), knowledge in the cognitive system is represented in categories. There are two ways that categories originate, namely exemplar learning and conceptual combination. Exemplar learning is central in the processes of acquiring taxonomic knowledge about the world as it exists. It is relatively passive, bottom-up, and an automatic process. In contrast, goal-derived categories arise through conceptual combination by manipulation of existing knowledge in memory. Barsalou (1991) rephrases as follows:

“By deliberately manipulating knowledge through reasoning, people produce new categories that serve their goals ... conceptual combination often produces idealized knowledge about how the world should be ... rather than ... about how it is” (p. 4).

Further, he argues that goals and their attributes are presented in frames, which he defines as flexible, loosely organized bodies of knowledge. An example

is illustrated in Bagozzi and Dholakia (1999). A frame for a vacation goal may consist of the vacation category and its connections to five attributes, namely locations, temporal parameters, activities, objects, and actors. Each of these attributes, in turn, might be connected to clusters of more specific attributes which are concerned with specific activities, such as departure, duration, return, and schedule are types of temporal parameters, and preparations, travel, and entertainment. The specific attributes further might be composed of subtypes such as major travel (transcontinental flight), minor travel (taxi from airport to hotel), and arrangements at location (e.g., reserving a seat on a tour bus) which are the subtypes of travel. Such frames are useful in planning goals and knowing how other goals and constraints promote planning. In the context of planning vacation, for example, such background goals as “maximize relaxation and educational value” guide the selection of exemplars for a frame instantiation. Within a particular frame, certain attributes also constrain the range of other attributes. Thus, a needed departure of July for a snow-skiing vacation requires a ski resort in the southern hemisphere.

Closely related to the cognitive psychological conception is the hierarchical representation of motives in goal setting (Bagozzi, Bergami, & Leone, 2003), which proposes that motives in goal setting, as opposed to goal striving, can be represented in schemas. A schema pertains to “a set of motives and perceived relationships among the motives” (p. 915). Based on some anthropological and psychological studies, they further argue that schemas can be represented in hierarchical structures. A central position in a hierarchical structure of motives in goal-setting is focal goals, which signify the question of, *What* is it for which I strive? A focal goal can be related to reasons for acting and depicted through a three-tiered hierarchy. Below the focal goals are subordinate goals, or sometimes called as instrumental goals, which constitute the means for achieving the focal goal and answering the question of, *How* can I achieve that for which I strive? At the top of the hierarchy are superordinate motives, which answer the question, *Why* do I want to achieve that for which I strive? The relationship between superordinate and subordinate motives with focal goals signifies that “a person’s focal goal in any situation is explained by his or her superordinate motives and is achieved through implementation of subordinate goals.” The simplified form of such schema is shown in the left hand side of Figure 2.2.

A hierarchical representation of goal schema may represent the means-end framework of consumer behaviour (Gutman, 1997). The right hand side of Figure 2.2, as adapted from Canova, Rattazzi, and Webley (2005), illustrates the means-end framework of hierarchical structure of goals in the context of the goals of saving. Notice that the focal goal, i.e., “accumulating savings”, is connected with two subordinate goals or action goals (Gutman, 1997), namely put-

ting money in a saving account and participating in a pension plan. Likewise, three superordinate goals are connected with the focal goal, namely an assured retirement situation, to avoid debt, and to increase or maintain self-esteem.

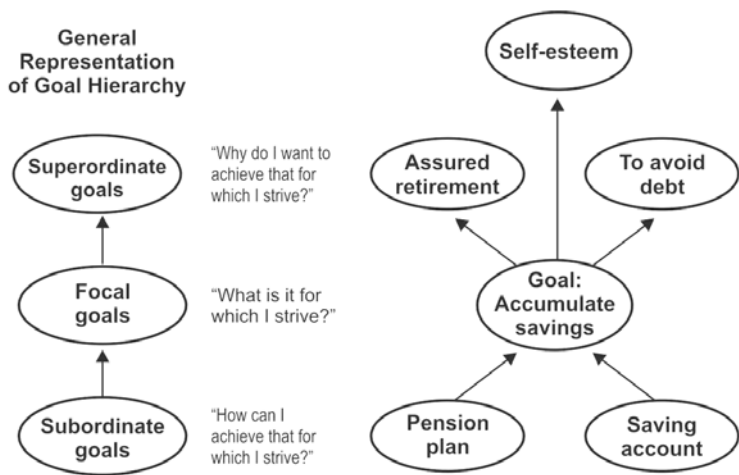


Figure 2.2. The three-tiered goal hierarchy as adapted from Bagozzi and Dholakia (1999, p. 24) and Canova, Rattazzi, and Webley (2005)

The hierarchical structure of consumer goals has been conceived in terms of means-end chain (Gutman, 1982, 1997). Products are equipped with attributes. The consumption of product attributes produces consequences, namely the benefits that consumers obtain from consumption. The significance of the consequence is determined by its subjective value. Thus, consumption represents hierarchical structure that consists of Attribute – Consequence – Values. The hierarchical structure of consumer goals has been studied at the level of intermediate goals (Pieters, Baumgartner, & Allen, 1995; Canova, Rattazzi, & Webley, 2005). These studies confirmed the hierarchical structure of focal goals.

Another theory that depicts the cognitive-motivational structure of goals is the goal system theory (Kruglanski et al., 2002). A goal system is defined as a mental representation of motivational networks composed of interconnected goals and means, as visualized in Figure 2.3. Thus, goal systems consist of mentally represented networks wherein goals may be cognitively associated to their corresponding means of attainment and to alternative goals as well. The associative network of the mental representation of goals means that the activation of one goal may either activate or inhibit another goal. Two properties of goal system can be derived, namely the structural and allocational properties. In structural terms, functional relationships between goals might be characterized as either facilitatory or inhibitory. Facilitatory pertains to the activation of a goal thus facilitating the activation of another goal. In the hierarchical schema, it ap-

pears in the vertical relationship. In contrast, inhibitory relationship implies that the activation of one goal inhibits the other, as apparent from the horizontal relationship between goals.

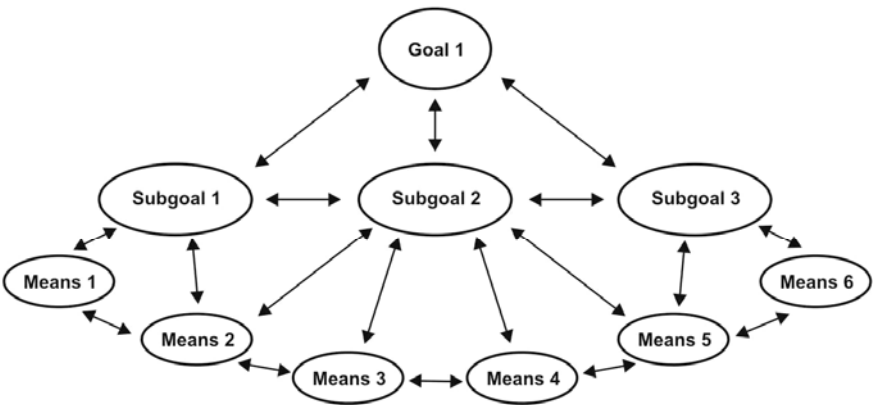


Figure 2.3. A system of goals and means (Kruglanski et al., 2002, p. 334)

Furthermore, interactions between goals can be characterised in terms of their form and their strength. Two forms of between-goal interactions are *multifinality* and *equifinality*. Equifinality is signified when two or more goals are connected as origin with one end-goal. In contrast, multifinality is signified when one goal serves, as origin of, two or more goals, as the destination. The strength of interconnection is not independent of form, because the uniqueness of the interactions determines the strength of connection. Connections between goals are stronger when there is no other goal associated, either as origin or destination. The smaller the equifinality and multifinality, the stronger the association between two goals. Regarding the allocational property, a major characteristic of goal systems is the restricted nature of mental resources to be distributed among goals. One principle that applies is the ‘constant sum’ of the mental resources, which means that allocation to one goal implies a reduction to other goals.

2.4. Goal content

Desired states or goals are often expressed in the language of consumer as something that is needed, wanted, desired, enthused by, or valued. They may say that their goals are to satisfy what they need, want, or desire. In addition, they may say that their goal is to achieve certain level of possession or certain kinds of identity or lifestyle. Thus consumers are said to having *needs*, *wants*, *desires*, *motives*, and *values*.

Need and *want* are among the most common English words involving intentions or desires (Wilensky, 1978; Moore, Gilbert, & Sapp, 1995). *Desire* expresses stronger volitional aspects of the behaviour (Belk, Ger, & Askegaard, 2000), and *value* pertains to something that is relatively everlasting (Rokeach, 1973). Unlike *need*, *motive*, *value*, and *goal* which have been regarded as important constructs in psychology, *want* and *desire* have been relatively ignored in the literature of human behaviour. To get a broader insight regarding the motivational factors of consumer behaviour, all of these motivational constructs will be reviewed in this section. In addition, constructs of thematic goal (Huffman, Ratneshwar & Mick, 2000) and goal orientation (e.g., Higgins, 1997, 1998), which explain behaviour beyond individual categories of goals, will be examined.

2.4.1. Needs, wants, and desires

Needs are often distinguished from other motivational factors on the bases that a need signifies some biological drives such as hunger, aggression, or sex. For example, Newton (1994) defines drive as a “state of arousal resulting from a biological (or, occasionally, psychological) need.” More specifically, Neufeldt & Guralnik (1988) states that the noun of need is used to refer: (1) necessity or obligation created by some situation; (2) in terms that reflect a condition of lacking of something useful, required, or desired; (3) in terms of objects that are useful, required, or desired but are in short supply; (4) a condition in which there is a deficiency of something, or one requiring relief or supply. While Newton (1994) and Ferguson (1984) define needs in relations to: (a) a motivational state resulting from deprivation of something that an organism requires for survival, (b) the deprivation is mostly associated with a biological requirement. Newton (1994) emphasizes that need can also be used to signify deprivation of a psychological or emotional nature, such as need for achievement (McClelland, 1961). In this sense, needs are similar to drives.

Schiffman and Kanuk (2004) specify the typology of needs that includes innate needs and acquired needs. Innate needs pertain to physiological or biogenic needs, that is, it includes needs for things such as food, water, air, clothing, shelter and sex. Because they are essential in sustaining biological life, biogenic needs are considered primary needs. Acquired needs may include needs for self-esteem, prestige, affection, power, and learning. Acquired needs are generally psychological (i.e., psychogenic). They are considered secondary needs. They arise because of the consequence of individual’s subjective psychological state and the individual’s relationships with others. Murray (1939) proposes an extensive list of psychogenic needs, e.g., needs associated with inanimate objects, needs that reflect ambition, power, accomplishment, and prestige, needs concerned with human

power, sadomasochistic needs, needs concerned with affection between people, and needs concerned with social intercourse (the needs to ask and tell).

Several theories, most notably Abraham Maslow, conceive needs as hierarchically organized, as shown in Figure 2.4. At the bottom of the hierarchy are biological and physiological needs such as air, food, drink, shelter, warmth, sex, and sleep. The satisfaction of these needs is the bases for moving into the higher level, namely safety needs. It consists of needs such as protection, security, order, law limits, and stability. Belonging and love needs become important biological, physiological, and safety needs are met satisfactorily. Family life, affection, relationship, workgroup, and other social relationship become important to the individual. In turn, these needs provide the bases for esteem needs, such as the needs of achievement, status, responsibility, and reputation. The highest need of the hierarchy is concerned with self-actualisation. Individuals who achieve this stage are focused on personal growth and fulfilment. Conceptually, each need is mutually exclusive. However, no need is ever satisfied completely, hence there are always some overlaps between each level.

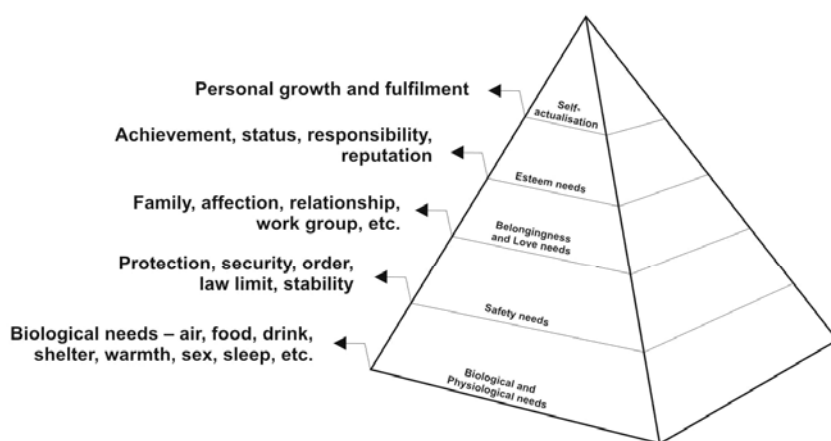


Figure 2.4. The original five-stage model of Maslow's Hierarchy of Needs

Wants are often distinguished from needs and other constructs of motivational factors on the basis that what is wanted is to satisfy psychological drives. In ordinary language, it manifests in an expression such as “I know I need a new car, but I will ultimately buy the one I want!” (Brooks, 2001). In Webster’s New World Dictionary want is defined as: (1) to feel a need or a desire for, wish for; (2) to wish, need, crave, demand, or desire; (3) to feel inclined, wish, like; (4) to be deficient by the absence of some part or thing, or to feel or have a need; (5) to be lacking or absent, as a part of thing necessary to completeness (Neufeldt & Guralnik, 1988).

Wilensky (1978) explains the differences between *need* and *want* from the perspectives of linguistics and cognitive or natural language processor. He states that there are two intentional factors underlying the definition of need and want. The first factor is *goal* which he refers to as a mental state that leads to actions mediated by thought. The other factor is concerned with *sources* or *reasons* that cause that goal to come into being. Further, the sources are divided into two types. The first source is *plan source* which refers to a goal aimed at fulfilling a precondition for a plan for another goal. To illustrate, having some savings may be instrumental to the plan of enjoying retirement. The second source is *thematic source*. A thematic source is a goal that arises because of certain basic tendencies or naturally default conditions to be satisfied. For example, hunger is a natural drive for people to satisfy. Thus, thematic categories of the sources or reasons of goals can consist of themes such as PRESERVATION (gives rise to the goal of saving one's life if an event occurred which threatened it), ENJOYMENT (to get pleasure), and OBLIGATION (gives rise to a goal of complying some social contract). Based on these factors, Wilensky defines need and want as follow:

“NEED: “A needs X” is used when: (a) X is an essentially unique precondition for a plan for a goal of A's, or (b) X is an essentially unique action that would result in a goal of A's.

“WANT: “A wants X” is used when A has X as a goal, and the source of X is other than a PRESERVATION or OBLIGATION theme.

In other words, Wilensky (1978) highlights instrumentality in terms of preservation and obligation as a factor that distinguishes need from want. Toward this end, need is applied when the thing needed is a goal as an inference, that is, a goal that is not stated, for it is a condition to satisfy another goal. Whereas want is applied when what is wanted is a part of the meaning of the word. Moore, Gilbert, and Sapp (1995) differentiate need and want based on the relative strength with which a desire is expressed. When need is used, the expressed desire carries more force than when want is used.

A closely related word to *need* and *want* is *desire*. Belk, Ger, and Askegaard (2000) illustrate the context of *desire* in consumer behaviour as follows:

“We say in English that we burn and are aflame with desire; we are pierced by or riddled with desire; we are sick or ache with desire; we are tortured, tormented, and racked by desire; we are possessed, seized, ravished, and overcome by desire; we are mad, crazy, insane, giddy, blinded, or delirious with desire; we are enraptured, enchanted, suffused, and enveloped by desire; our desire is fierce, hot, intense, passionate, incandescent, and irresistible; and we pine, languish, waste away, or die of unfulfilled desire.” (p. 99).

To understand the motivational distinctiveness of *desire*, they suggested to substitute *desire* with *need* or *want* in these metaphors. They concluded:

“Needs are anticipated, controlled, denied, postponed, prioritised, planned for, addressed, satisfied, fulfilled, and gratified through logical instrumental processes. Desires, on the other hand, are overpowering; something we give in to; something that takes control of us and totally dominates our thoughts, feelings, and actions. Desire awakens, seizes, teases, titillates, and arouses.” (p. 99).

In general they concluded that *need* is perceived to originate internally, whereas *desire* externally; *need* pushes, whereas *desire* pulls; *need* is rational in the sense of being based on a certain rationalized explanation, whereas *desire* is emotional. With regards to this analysis, we believe that *desire* as Belk, Ger, and Askegaard (2000) conceived, is the extreme form of *want*. Although they implicitly conceived *need* and *want* as similar constructs, we believe that they are distinct constructs. However, the push-and-pull dimension might apply to *need* and *want*, in which *want* is located in the pull side.

2.4.2. Motives

Whereas needs and wants are driven by biological or psychological factors, motives are referred to as socially or cognitively driven behaviours. Gollwitzer, Delius, and Oettingen (2000) suggest that motives can be divided into three sets of phenomena, namely the selection of a certain course of action, the energizing of the implied behaviours, and the regulation of these behaviours. Nevertheless, they also use motives to refer to biological drives. They argue that to the extent that modern psychology has come to accept that all psychological processes are due ultimately to physiological activity, the division between needs and motives on the bases of physiological or cognitive factors is somewhat arbitrary.

The construct of motives is more prominent in economics and consumer behaviour studies, as compared to the construct of needs, and desires. Economic theories of saving, such as Keynes (1936/1964), Duesenberry (1949), and Modigliani and Brumberg (1954) are based on certain assumptions regarding saving motives. In comparison, studies and theories regarding spending motives largely originate from the discipline of consumer behaviour. The construct of spending motives in this discipline has been discussed extensively. This section attempts to review the constructs of saving and spending motives from both disciplines.

Saving motives

Keynes (1936/1964) distinguishes eight saving motives: (1) to build up a reserve against unforeseen contingencies – *the precautionary motive*, (2) to provide for the

anticipated future relationship between income and needs – *the foresight motive*, (3) to enjoy interest – *the calculation motive*, (4) to enjoy a gradually improving expenditure – *the improvement motive*, (5) to enjoy a sense of independence and power to do things – *the independence motive*, (6) to secure a *masse de manœuvre* to carry out speculative business projects – *the enterprise motive*, (6) to bequeath a fortune – *the pride motive*, and (8) to satisfy pure miserliness – *the avarice motive*.

Keynes' conception of saving motives has inspired further works on the field. Browning and Lusardi (1996) added one type of saving motive to the list, namely down-payment motive. From empirical studies of household savings in the US in 1960s, Katona (1975) distinguished the saving motives into six types, namely for emergencies (such as ill-health, unemployment), to have funds in reserve for necessities (buffer), for retirement or old age, for children's needs, to buy a house or durable goods and for holidays. Nijkamp, Gianotten, and Van Raaij (2002) found that there was more than one type of precautionary motive. A precautionary motive can be distinguished into preparedness to unforeseen expenditures and irregular income. The latter type of precautionary motive is particularly applicable to business people, and similar to the foresight motive of Keynes (1936/1964).

Built on a different conception of income, Duesenberry (1949) proposed social-oriented saving motives. Income is not a factor of saving in the absolute sense as in Keynes theory. Rather, social comparison or social reference determines consumption standards of individuals and households, and thus their saving. Another economic theory that is based on an assumption of motives in saving and consumption is the life-cycle theory (Modigliani & Brumberg, 1954). The theory hypothesizes that people prefer a stable level of consumption throughout the lifetime, thus a stable standard of living. Savings are used to smooth consumption over the stages of the life-cycle in which income level varies. During the young age, when income is lower than the level of life-cycle income, people finance consumption through borrowing. During the peak of the productive age, which normally is approaching the retirement age, income is generally higher than the level of life-cycle income. During this period people accumulate savings. When the life-cycle reaches the retirement, during which people earning much less than the life-cycle income level, people finance their consumption from their savings. The same type of assumption, i.e., consumption smoothing, is held by another theory, namely the permanent income hypothesis (Friedman, 1957). However, this theory assumes a shorter time horizon, which approximately equals to three years. In addition, this theory adds bequest motive as an important motivational factors in saving and consumption.

These views advocate saving motives as a certain psychological construct inherent in the mental system of an individual. In contrast, the behavioural life-

cycle hypothesis (Shefrin & Thaler, 1988) assumes that saving is a by product of some mental processes which involves mental faculties such as *planner* and *doer*, as summarized in Chapter 1, section 1.4.2. In short, this theory proposes that the construct of saving motive consists of intrinsic orientation toward future and self-control against temptation of immediate gratification.

Spending motives

Extensive studies have been conducted on content and organization of consumption motives. The types of consumption motives might be unlimited. Consumption involves social, cultural, and economic processes (Zukin & Maguire, 2004). Consumption motives potentially exist in all areas of human behaviour. The breadth of the area is evident in the involvement of scientific endeavour in the domain of humanities and social sciences (Campbell, 1991). Thus, every individual in every context can set specific consumption motives, resulting in idiosyncratic motives of consumption. A conceptual way to simplify consumption motives is by distinguishing them according to some dimensions. Khan, Dhar and Wertenbroch (2005) distinguish two theoretical approaches regarding dimensions of consumption motivation: preference in the context of trade-offs with functional goals, and preference in the context of time inconsistency.

Preference in the context of trade-offs with functional goals. This dimension can be divided into hedonic and utilitarian motives (Hirschman & Holbrook, 1982; Strahilevitz & Myers, 1998; Dhar & Wertenbroch (2000). Hedonic consumption captures multi-sensory, fantasy and emotive aspects of consumer's consumption experience with products (Hirschman & Holbrook, 1982). It is related to people's fun, pleasure, and excitement, thus concerns products or services that are consumed for its experiential aspects (Pham, 1998). It may include luxuries (Kivetz & Simonson, 2002) and products or services that are considered affect-rich (Rottenstreich & Hsee, 2001; Hsee & Rottenstreich, 2004). The examples of hedonic consumption are consumption of flowers, designer clothes, music, sports cars, luxury watches, and chocolate. In comparison, utilitarian motives concern the consumption of something on the bases of its instrumentality or functionality in achieving certain goals (Hirschman & Holbrook, 1982). A utilitarian motive may pertain to necessity items, that is, items that are indispensable for the preservation of a minimum standard of living. Examples of these motives include consumptions of microwaves, detergents, minivans, home security systems, and personal computers. Necessity items also include things such as food, clothing, and medical care. Such objects of consumption may be characterized as affect-poor goods (Rottenstreich & Hsee, 2001; Hsee & Rottenstreich, 2004). Whereas hedonic products or services may be chosen intuitively, probably through liking or disliking, utilitarian or necessity goods may be chosen through deliberate proc-

esses of decision making. In other words, hedonic versus utilitarian dimensions of consumption motives are related to dimensions that include affect-rich vs. affect-poor (Rottenstreich & Hsee, 2001; Hsee & Rottenstreich, 2004), and experiential vs. instrumental (Pham, 1998).

Preference in the context of time-inconsistency. This dimension can be divided into motives of immediate pleasure and longer-term benefits. It is related to the *shoulds* vs. the *wants* in the ordinary language of the consumers. *Shoulds* signify *needs*, which may include requirements, necessities, duty or obligation. While *wants* are associated with desire. *Shoulds* or needs are perceived to originate internally, whereas *wants* or *desire* originate externally. Needs push, whereas desires pull. *Needs* are rational in the sense of being based on certain rational explanation, whereas *desire* is not rational. Thus *wants* vs. *shoulds* signify conflicts between affective vs. cognitive preferences, and desire vs. willpower (Hoch & Loewenstein, 1991), or hearth vs. mind (Shiv, Fedorikhin & Nowlis, 2005). Affective, desire, and hearth lead to impulsive decisions that are inclined toward immediate gratifications. In contrast, cognition, and willpower bring consumer to preference over long-term benefits. Next, *shoulds* vs. *wants* also signify conflicts between virtues and vices. A vice concerns an affective want that is motivated by impulses. In the context of time preference, a vice may manifest in the preference of small but immediate hedonic gratification to the larger gratification in the future. The latter signifies virtue, which reflects reasoned and cognitively preferred choice option: larger but delayed consequences. Preference in the context of time-inconsistency may reflect a common tendency that what is gratifying now is not what is preferred for the future. Thaler & Shefrin (1981) and Shefrin and Thaler (1988) represent this dilemma in the eternal conflict between the doer and the planner. This representation reflects problems of self-control of the consumer.

2.4.3. Values

Another related construct of goals concerns values. Schwartz (1997) relates values to what people believe are good or bad, what people think should and should not be done, and what they hold to be desirable or undesirable. Similarly, Rokeach (1973, p. 5) defines a value as “an enduring belief that a specific mode of conduct or end state of existence is personally or socially preferable to an opposite or converse mode of conduct or end state of existence.” A value is enduring, which implies stability, yet malleable over certain conditions, which implies flexibility. A value refers to a mode of conduct or an end state of existence. The former signifies instrumental values, whereas the latter signifies terminal values. However, they are not completely discrete entities. There is a functional relationship between instrumental and terminal values. According to Rokeach, human values are organized in certain value systems.

Rokeach's values can be classified into seven domains, namely pleasure, security, achievement, independence, maturity, conformism, and social. In comparison, Holbrook (1999) distinguishes consumer values into three dimensions: whether self- or other oriented, whether active (manipulating, operating) or reactive (apprehending, appreciating, admiring), and whether extrinsic (consumption in order to achieve other goals) or intrinsic (consumption that provides ends in itself). Other related works in value systems concerns dimensions of culture (e.g., Hofstede, 2001; Schwartz, 1994).

Value is highly cultural-sensitive. Schwartz (1997) argues that the hearth of culture is formed by values. Much of what an individual believes as desirable or undesirable is shared with other people in their society. People of a society share the experience of being exposed to similar situations, experiencing similar opportunities, and being disciplined and rewarded for the same action. Hence, much of values are shared with people of the same cultural background. Similarity within a culture is often interpreted as the bases of cross-cultural differences. Hofstede (1980, 1991) identified four basic dimensions of values which are different across cultures, namely power distance, individualism/collectivism, masculinity/femininity, and uncertainty avoidance. In comparison, Schwartz (1992) suggests three dimensions of cultural values, namely conservatism vs. Autonomy, hierarchy vs. egalitarian, and mastery vs. harmony.

Nevertheless, Schwartz and Bardi (2001) found a widespread consensus regarding the hierarchical order of values across different cultural backgrounds. In their study, they compared the hierarchical order of the average value obtained from the representative and near representative samples from 13 nations, and a sample that consists of school teachers in 56 nations and college students in 54 nations. Results of the analysis exhibit a similar pattern in all of the sample groups. Specifically, benevolence, self-direction, and universalism values are consistently most important, whereas power, tradition, and stimulation values are least important. Values pertaining to security, conformity, achievement, and hedonism are in between the opposite group of values. Further, they found that value hierarchies of 83% of samples correlate at least 0.80 with this pan-cultural hierarchy.

2.4.4. Thematic goals

Needs, wants, desires, motives, and values are similar in the sense that they represent single units of motivational factors of consumer behaviour. Goal-pursuit behaviour often consists of several motivational units (Kruglanski et al., 2002). Thus, it may encompass several needs, wants, desires, motives, and values. Huffman, Ratneshwar, and Mick (2002) label these as mid-level goals. Social cogni-

tive literature contains concepts of mid-level goals such as *current concern* (Klinger, 1975), *personal striving* (Emmons, 1986, 1989), *life task* (Cantor & Kihlstrom, 1987), and *personal project* (Little, 1989) may be considered as exemplars of consumers' goals. Huffman, Ratneshwar, and Mick (2000) propose a hierarchical model of goals that they say integrate some of these constructs.

In their model, consumer goals are hierarchically structured, which implies that the goals at the higher levels (as compared to the lower levels) are more abstract, more inclusive, and less mutable. The hierarchical structure of consumer goals consists of six discrete goals, namely life themes and values, life projects, current concerns, consumption intentions, benefits sought, and feature preferences. These six discrete goals can be classified according to three states of existence, namely being, doing, and having. In the goal-pursuit context, consumers acquire possessions to perform actions that move them closer to realizing their values and ideal selves (Belk, 1988). This model, along with some adaptation to the generic context, will be discussed in this section. The hierarchical structure of consumer goals is represented in Figure 2.3.

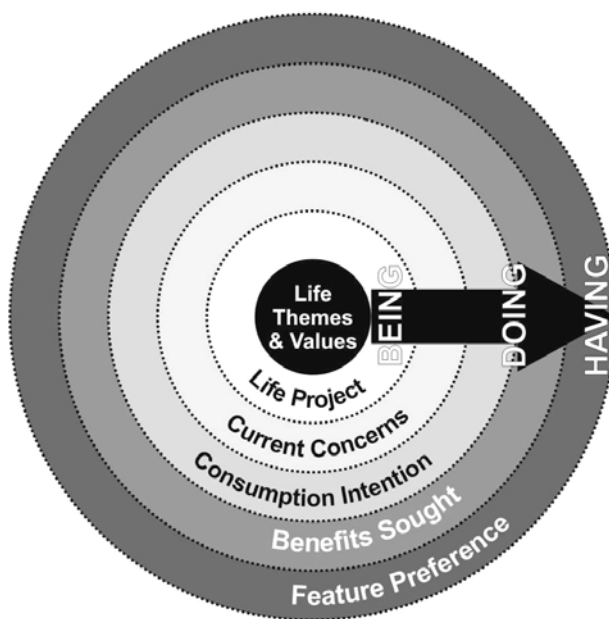


Figure 2.5. Hierarchical model of consumer goals
(Huffman, Ratneshwar, & Mick, 2000, p. 14)

Benefits sought refers to the consequences of consumption, and *feature preferences* refer to the preferred product feature levels or values as stated in concrete physical or financial terms. Although similar, they are conceptually different, in the sense that benefit sought is relatively more subjective and out-

come-referent. It is similar to the consequence in the means-end chain framework (Gutman, 1982; Reynolds & Gutman, 1988); therefore *benefit* and *consequence* will be used henceforth alternatively. In contrast, feature preferences are relatively objective and product-referent, which is similar to the attribute in the means-end chain framework. Nevertheless, benefits sought and feature preference signifies individual evaluation toward a course of action, which may influence certain type of goals at higher levels becoming more salient than the others. Benefits sought and feature preferences are more closely related to the specific levels and choice of brands and product variants.

Consumption intentions capture individuals' aims and desires to engage in particular ways of using their income. For example, a person's aim to commute to work by public transport, or an employee intention to invest retirement savings in a mutual fund, or a habitual desire to drink a glass of wine with dinner. In the means-end chain framework, current intentions can be compared to action goals or concrete goals, or action units of the personal striving approach (Emmons, 1989). In consumer behaviour at the generic allocation level, current intentions consist of saving and spending intentions (Antonides & Van Raaij, 1988; Lea, Tarpy & Webley, 1987).

Current concerns consist of activities, tasks, or quests in which an individual is involved in short term (Huffman, Ratneshwar & Mick, 2000). In the personal striving model (Emmons, 1989), this construct is similar to that of concern, project or task. It is shorter in time-orientation than life projects and represents tasks that need to be done by the individual. Along with life projects, this goal can be subsumed under focal goals or intermediate goals of the means-end framework (Pieters, Baumgartner & Allen, 1995; Bagozzi, Bergami & Leone, 2003). In the context of the life-cycle, current concerns may include the ongoing needs of the family members, such as expenses for education, necessities for the household, and health and safety requirements.

Life projects: Huffman, Ratneshwar and Mick (2000) explain that life projects concern the construction and maintenance of key life roles and identities. Examples include being a responsible mother, a loyal employee, or a successful teacher. Compared to life themes and values, life projects are in flux over the life span. However, it still lasts longer than lower level goals. Individuals are likely to undergo major changes in their life projects upon embarking through a life transition, such as marriage or divorce, getting children, career changes, and retirement. This construct is similar to the conception of personal strivings (Emmons, 1989). Life projects represent superordinate abstract qualities that render a cluster of goals functionally equivalent for an individual. Examples include goals to become financially independent from others, to provide good education for children, or to acquire a decent standard of living.

Life themes and values represent the personal ideals of being that a consumer wants to achieve or to preserve. Huffman, Ratneshwar and Mick (2000) explain that life themes and values represent core conceptions of self and are thus central to maintaining the integrity of the self-system. Life themes and values are the most stable among other levels of goals, and highly accessible across a variety of circumstances. Life themes and values can be compared to superordinate goals (Taylor, Bagozzi, Gaither & Jamerson, 2006), or terminal values, that is, enduring beliefs that an end state of existence is preferable to other possible end states (Rokeach, 1973). In terms of the position in the hierarchy of needs, Maslow (1954) proposed the need for self-actualization that represents motives such as morality, freedom, trust, honesty, and creativity. However, a small percentage of the population is actually achieving this stage. Instead, the lower levels of needs, particularly esteem, appears to reflect more of the consumer goal systems at the generic level. Studies in saving motives identified self-esteem and self-gratification on the top of the hierarchical structure (Canova, Rattazzi & Webley, 2005). Ethical investing, such as in stocks of “green” companies (Lewis, 2001; Webley, Lewis & Mackenzie, 2001), may reflect life themes and values of the investor.

2.4.5. Goal orientations

A recent approach to goal construct conceives goals not in terms of its contents (e.g., Murray, 1938; Keynes, 1936/1964; Rokeach, 1973; Schwarz, 1997) or its hierarchical organization (e.g., Maslow, 1954; Huffman, Ratneshwar, & Mick, 2001), but in terms of the motivational orientation. This approach assumes that there is a systematic direction in goal-pursuit behaviour, in relation to the expected outcomes of the act. A widely accepted framework is that people are motivated to approach expected pleasure and to avoid unexpected pain. This universal tendency signifies the hedonic principle of human behaviour, a fact that has been understood since the time of ancient Greeks, and has been the basic motivational assumption of theories across all areas of psychology. However, Higgins (1997, 1998) argues that the hedonic principle is not sufficient for explaining the self-regulation of motivational behaviour. He proposed the regulatory focus theory that can be viewed as providing a refined account to the hedonic explanation of human motivation.

The basic tenet of regulatory focus theory is that pleasures, or desired end states, and pains, or undesired end states, are regulated in substantially different strategic ways. Further, the theory postulates that there are major consequences of the distinctive regulatory orientations to pleasures and pains. Whereas hedonic principle states that pleasure implies approach self-regulation and pain implies avoidance self-regulation, regulatory focus theory postulates that pleasures can be each regulated through approach and avoidance strategies, and the same strategies for self-regulation in relation to pains. This means that an individual self-

regulates his or her behaviour to approach the attainment of a desired end state or to avoid the failure of attaining a desired end state. Similarly, individuals may self-regulate his or her behaviour in order to avoid an undesired end state, or to approach a condition that mismatches the undesired end state. Another characteristic of the theory is that the approach and avoidance of self-regulation can be associated with the promotion and prevention focus, respectively. An important facet of the theory is its proposition that promotion and prevention focus can be chronic self-regulatory mechanisms that indicate individual differences, or could be induced situationally. Regulatory focus has been applied extensively in consumer behaviour (e.g., Pham & Higgins, 2005; Zhou & Pham, 2004; Chernev, 2004b).

Regulatory focus theory

Regulatory focus theory is built on the foundation of the hedonic principle. Pham and Higgins (2005) explain that the hedonic principle can be viewed from three perspectives, namely the principle of regulatory anticipation, the principle of regulatory reference, and the principle of regulatory focus. From the principle of regulatory anticipation, people's behaviour is based on their expectation or anticipation. That is, people *expect* or *anticipate* the *consequences* or *outcomes* of their actions and adjust their behaviours accordingly. This principle justifies the social-cognitive perspective that future state is represented in the mind determining present behaviour (Bandura, 2001). An anticipated consequence of an act can be either positive (i.e., pleasure, desirable, gains, etc.) or negative (i.e., pain, undesirable, losses, etc.). Anticipated consequences determine decision making, as evident in the tendency of people to choose options that provide positive consequences as compared to negative consequences, higher positive consequences than lower positive consequences, or lower negative consequences than higher negative consequences.

The principle of regulatory anticipation is robust in many theoretical and applied domains. For example, the regulatory principle of anticipation is the cornerstone of expected utility theory, which provides theoretical foundations for the discipline of economics. In economic psychology studies such as by Katona (1975), the principles of regulatory anticipation were used in explaining financial behaviour of households. It was found that people are more willing to spend their money when they anticipate positive macro-economic and household financial situations in the future. When the anticipation is the opposite, people are less willing to spend, but more motivated to save their money. At the macro-economic level, the aggregate of individual consumers' regulatory anticipation can predict recession (Ludvigson, 2004), output of an economy in the next semester (Matsusaka & Sbordone, 1995), and household spending (Carrol, Fuhrer & Wilcox, 1994). In investing behaviour, anticipations are often referred to as "hope"

and “fear”. The fact that financial markets are often driven by hope and fear (e.g., Cohen, 2001; Warneryd, 2001) thus justifies the importance of regulatory anticipation in the market.

Nevertheless, it must be stressed that anticipation is not a goal. Anticipation indicates the point of reference toward which an individual aligns his or her behaviour. Consequently self-regulation can be viewed in terms of the principle of regulatory reference. That is, a regulatory reference represents *point of reference* that the person uses in self-regulation. For example, given an anticipation of financial needs in retirement, self-regulation can operate either in reference to a desired end state or in reference to an undesired end state. One may be hopeful of having enough money to enjoy hobbies and interests in retirement, whereas the other may be hopeful of avoiding inability to cater for necessities in retirement. The former signifies an approach regulation to a desired end state, whereas the latter signifies an avoidance approach to an undesired end state. Thus, approach and avoidance in regulatory reference is conceptualised in terms of movement toward desired end states (approach) or away from undesired end states (avoidance) (Pham & Higgins, 2005).

Whereas regulatory anticipation captures dimensions of outcomes (pleasure vs. pains, gains vs. losses, positive vs. negative, enough vs. not enough, more vs. less), and regulatory reference captures dimensions movement with regards to reference point (approach vs. avoidance), regulatory focus is conceptualised in terms of strategic means for self-regulation. In other words, regulatory focus is concerned with how people approach pleasure and how people avoid pain in different ways and the motivational consequences that arise from the strategies they use (Higgins, 1997). Self-regulation in referent to desired end states can be pursued either with means that are approach-oriented or with means that are avoidance-oriented. For example, approach-oriented means for financial preparedness in retirement are strategies such as investing and pursuing higher income through success in career. In contrast, avoidance-oriented means for the same goal might be controlling expenses or refraining from unnecessary purchases. Self-regulation dominated by means that signify approach orientation strategies are known as promotion focus, whereas self-regulation dominated by means that signify avoidance orientation is known as prevention focus. Further, in conjunction with the results observed in Higgins, Roney, Crowe, and Hymes (1994), Higgins (1997) stated that:

“Because a promotion focus involves sensitivity to positive outcomes (their presence and absence), an inclination to approach matches to desired end states is the natural strategy for promotion self-regulation. In contrast, because a prevention focus involves a sensitivity to negative outcomes (their absence and presence), an inclination to avoid mis-matches to desired end states is the natural strategy for prevention self-regulation” (p. 1282).

Table 2.1. Summary of basic tenets of regulatory focus theory

Consequence of act	PLEASURE		PAIN	
Hedonic principle	Approach pleasure		Avoid pain	
Regulatory anticipation	Approach in anticipated pleasure		Avoidance in anticipated pain	
Regulatory reference	Approach regulation in reference to desired end states		Avoidance regulation in reference to undesired end states	
	Success: presence of desired end state (pleasure)	Failure: absence of desired end state (pleasure)	Success: absence of undesired end state (pain)	Failure: presence of undesired end state (pain)
	Approach	Avoid	Approach	Avoid
Regulatory focus (Higgins, 1997, 1998)	Promotion means		Prevention means	
	Sensitivity to presence or absence of positive outcomes		Sensitivity to absence or presence of negative outcomes	
	Strategically approach matches to desired end states (and mismatches to undesired end states)		Strategically avoid mismatches to desired end states (and matches to undesired end states)	
	Approach as strategic means		Avoidance as strategic means	
	Insure Hits and insure against Errors of Omission		Insure Correct Rejections and insure against Errors of Commission	
	Openness to change		Preference for stability	
Needs dimension	The needs that individuals seek to satisfy			
	Growth and development, aspirations, accomplishment		Safety and security, responsibilities, obligations	
Standards dimension	The standards that individuals aim to align themselves			
	Ideal self		Ought self	
Behavioural outcomes dm	The presence of positive outcomes by ensuring the presence of <i>hits</i> and the absence of <i>errors of omission</i>		The absence of negative outcomes by ensuring the presence of <i>correct rejections</i> and the absence of <i>errors of commissions</i>	

Promotion focus and prevention focus can be distinguished in terms of needs that individuals seek to satisfy, standards, and behavioural outcomes (Avnet & Higgins, 2006). In terms of needs, promotion focus satisfies needs for growth and development, and needs arise from aspirations and accomplishment. In contrast, prevention focus is suitable for fulfilling needs of safety and security, and needs emanating from responsibilities and obligations. With regard to standards that individuals aim to align themselves, promotion focus suits *ideal self*, a self-concept that contains motivational ideas related to ideals, aspirations, ambitions, and desires. Prevention focus suits *ought self*, a self-concept that contains motivational ideas related to obligations, responsibilities, and duties. Regarding the behavioural outcomes of self-regulation, promotion focus is aimed at the presence

of positive outcomes by ensuring the presence of *hits* and the absence of *errors of omission*, whereas prevention focus is oriented toward the absence of negative outcomes by ensuring the presence of *correct rejections* and the absence of *errors of commissions*. Table 2.1 summarizes the basic tenets of regulatory focus theory.

Regulatory focus theory has received a wide acceptance from researchers of consumer behaviour. Zhou and Pham (2004) demonstrate that financial products are associated with promotion and prevention focus, and subsequently influence investing goals. Hamilton and Biehal (2005) show that promotion and prevention focus moderate the effects of self-view (i.e., independent or inter-dependent self-view) on risk preferences. Chernev (2004b) shows that preference for the status quo is a function of goal orientation and can be independent of loss-aversion. In particular, preference for the status quo are more pronounced for prevention-focused than for promotion-focused individuals. Louro, Pieters, and Zeelenberg (2005) identified that self-regulatory goals moderate the impact of pride on repurchase intentions. Bosmans and Baumgartner (2005) show the moderating effect of regulatory focus conditions on the influence of emotions on product evaluations. Avnet and Higgins (2006) demonstrate that the fit between regulatory focus and the manner of people's engagement affects value in consumer choices and opinions.

2.5. Conclusion and implications


The construct of consumer goals have been described based on the available literature. Research into goals in consumer behaviour has been based on the assumption of goal-directed behaviour. The formation and the self-regulation of goal-directed consumer behaviour can be explained in terms of the goal setting and goal pursuit framework. Multiple goals may become active at the moment of consumer decision making. To facilitate an effective functioning, goals are assumed to be organized in certain structural fashion. The structure embodies goal systems, and comprises of different contents of goals. The needs, wants, desires, motives and values may become parts of a consumer goal system. In addition, diverse goals might be characteristics in terms of thematic goals and goal orientation.

Toward this end, the literature has so far mainly reviewed consumer goals at the modal and specific levels of consumer decision making. A generic goal system may comprise of consumer goals at these more specific levels. Nevertheless, a specific method of goal elicitation for the generic level of consumer decision making is required.



Chapter 3

Research approach, data collection and the data



3.1. Research approach

Consumer goals have been studied extensively. There are three major approaches in the study of consumer goals, namely experimental, introspection, and constructivism. Each of the approaches features specific research methods. Experimental manipulations, self-report, and laddering techniques are the three major research methods associated with the three approaches, respectively.

Experimental approach

An experimental approach in the research of consumer goals attempts to examine the objectives or observable indicators of goal-driven behaviours. Among others, goal-driven behaviours are operationalized in terms of the strength of preference, which further can be observed through experimental manipulations of task choices. To assess the strength of goal-directed behaviours, experimenters focus the observation on the task-pursuits, affect levels and energy expenditures in the controlled environments. An experiment can be conducted in a laboratory or in a real setting. For example, Lee and Ariely (2006) conducted two experiments in a supermarket, and thus an experiment in a real setting, in order to examine changes in the goal specificity and cognitive orientation during the shopping process. Consumers who are just about to enter the supermarket are considered as indicating less concrete shopping goals, whereas consumers who are queuing at the cashier indicate more concrete shopping goals. Experimental tasks were administered at the two locations, i.e., the entrance to the supermarket and the exit way through the cashier.

To illustrate how goals are observed and assessed in a laboratory experiment, several examples will be briefly examined. Higgins, Roney, Crowe, and

Hymes (2004), Chernev (2004b), and Murali, Böckenholt, and Laroche (2007) conducted experiments requiring a priming self-regulatory orientation in consumer behaviour. To prime self-regulation focused on promotion, the procedures involve asking participants to reflect on and write-down their most important hopes and aspirations. To prime self-regulation focused on prevention, the participants were asked to reflect on and write-down their most important duties and obligations. The effects of self-regulatory orientation are measured in certain behaviours, e.g., preference for the status quo, is operationalized in two dimensions, namely preference for the status quo alternative or preference for inaction over action (Chernev, 2004b).

Another interesting example is the experiment reported in Lee and Shavitt (2006), which involves some experimental manipulations in order to heighten the salience of social identity and utilitarian goals. In the social-identity goal condition, subjects are asked to think of 20 impression-related behaviours, e.g., buying a convertible sports car or gaining weight. For each of the acts, participants are asked to imagine that they are performing the act. Subsequently they have to rate whether it will make a positive impression on their friends and classmates along a scale from 1 (*won't make a good impression at all*) to 5 (*will make a very good impression*). For utilitarian goal condition, participants are asked to rate the importance of 20 product features (such as the accuracy of a thermometer and a pair of sunglasses' UV protection) along a scale from 1 (*not at all important*) to 5 (*very important to me*).

There are several advantages of the experimental approach. First of all, the nature of the goal, the difficulty level and the allotted time to completion can be examined in a controlled environment (Karoly, 1993). An experiment can directly demonstrate consumer behaviour, assess the effects and dynamics of goals, and interactions between goals in a goal system (e.g., Fishbach & Dhar, 2005; Fishbach, Dhar, & Zhang, 2006). However, questions might be raised regarding the representativeness of the assessed goals and goal systems, with regards to real life situation (Karoly, 1993). Some experimental manipulations might become too reductionistic, in order to maximise control over the factors that influence the behaviour. In such cases, the experiment becomes less representative to that of real life situations. In other words, external validity constitutes a critical aspect of the experimental approach.

Introspection

In the introspection approach, researchers may be interested on examining goals of the consumers in certain situations, affects and cognitions related to the goals, along with the actual behaviours. Such research usually involves self-report pro-

cedures and instruments. When instruments of self-report are used, the participants are usually asked to list down their goals or goal orientations in the intended situation. The participants may also be asked to rate how strongly he or she is committed to each of the elicited goals. Alternatively, subjective goals might not be solicited, but the participants are asked to rate how strongly he or she is committed to each of a given goal. In order to study the goal organization, the participants may be asked to indicate whether each of the goals are in conflict with other goals (e.g., Aspinwall, 2003; Gravetter & Forzano, 2006). An example of this approach concerns the study of Van Houwelingen & Van Raaij (1989). Using self-report questionnaire, the study examines the participants' goals of reducing energy and subsequently measure the actual behaviour of energy consumption. Goals might be unique, since each individual has unique cognitive representations of the desired states (Austin & Vancouver, 1996).

A self-report instrument or procedure is especially appropriate for studying the subjective and idiographic aspects of consumer goals. Philosophically, each individual is in a unique position of knowledge and awareness of oneself; presumably no one knows more about an individual's goals than the individual him/herself (Gravetter & Forzano, 2006). Several theories are based on such notion, for example the theory of personal projects (Little, 1989), personal strivings (Emmons, 1986; 1989), life tasks (Cantor, 1990), and possible selves (Markus & Nurius, 1986). Another advantage is that self-reports provide the most direct way to assess psychological constructs (Gravetter & Forzano, 2006).

However, Austin and Vancouver (1996) express doubt concerning the usefulness of the idiographic approach without some procedures for accommodating the nomothetic principle. In addition, it is very easy for participants to distort self-report measures. Participants may deliberately lie, or his or her responses may be influenced subtly by the presence of a researcher, wording of the questions, or other aspects of research situations (Gravetter & Forzano, 2006). Finally, a self-report measure requires introspections on the participants' side, something which surprisingly is often difficult to do (Wilson, 2002).

Constructivism

Finally, consumer goals might be approached from the perspective of constructivism. Whereas the previous two approaches understood goals and consumer behaviour from the theoretical perspectives used by the researcher, as well as the research attempts to consumer goals in terms of a pre-defined sets measure, in this approach the researcher attempts to understand goals from the perspective of the consumer. This approach is also called as interpretive (Hudson & Ozane, 1988), naturalistic (Lincoln & Guba, 1985), and qualitative (Van Maanen, Daabs

& Faulkner, 1982). The laddering technique is a method that is popular in the studies of consumer goals, and can be considered a constructivism approach.

A laddering technique refers to a process of structured interview and data analysis in order to elicit and organize a psychological construct. The technique was originally developed by D.N. Hinkle, and was intended as a method to reveal superordinate constructs at ever higher levels of abstraction (Bourne & Jenkins, 2005). The laddering technique as conceived by D.N. Hinkle was based on the personal construct theory and the associated repertory grid technique (Kelly, 1955, 1965), which assumes that people use bipolar constructs in representing people, events, objects, and circumstances. The original procedure was further developed by Reynolds and Gutman (1988), in order to suit consumer behaviour and marketing research. The latter version of the laddering technique is based on the means-end chain theory of consumer behaviour (Gutman, 1982). In these contexts, the interview involves an in-depth, one-on-one process that elicits the means-end chains of attributes, consequences, and values associated with a particular brand, product, or category (Reynolds & Gutman, 1988, 2001; Grunert, Beckmann, & Sørensen, 2001; Reynolds, Dethloff, & Westberg, 2001). Nevertheless, in the broadest sense the objective of the application of a laddering technique is to elicit increasingly superordinate constructs such as consumers' goals (Walker & Winter, 2007).

Since the seminal work of Reynolds and Gutman (1988), the laddering technique has been applied widely in marketing and consumer behaviour research (Olson & Reynolds, 2001). Subsequent development was introduced in Pieters, Baumgarner, and Allen (1995), which suit for eliciting superordinate goals of a focal goal. Bagozzi, Bergami, and Leone (2003) applied the same procedure for eliciting focal goals in an organizational behavioural context, and Canova, Rattazzi, and Webley applied the procedure in a study on saving behaviour. Antonides and Van Raaij (1998) propose a top-down laddering technique, which is the opposite of the laddering technique so far discussed. It is concerned with the question of "how."

There are several advantages of the laddering technique for eliciting consumers' goal constructs. In general, the laddering techniques offer a way for eliciting consumers' goals along with the structural and functional properties that interconnect between the goals. This is an important quality, because single goals cannot be understood when isolated from other goals (Austin & Vancouver, 1996). Furthermore, D'Andrade (1992) suggests that the interconnection between goals (i.e., goal schemas) represents the overall interpretive systems of the individual, and thus provides the bases for understanding the person as a whole. Towards this end, an advantage of a laddering technique is its ability to elicit

idiosyncratic goal responses, which can be analysed to produce schematic organization and hierarchical structure by which goals are organized. However, ladder- ing techniques are relatively more difficult to administer, and can be relatively costly. In addition, the skill of the interviewer is very crucial in producing quality and meaningful data (Reynolds, Dethloff, & Westberg, 2001). For purely research purposes, however, the paper-and-pencil procedure as applied in, e.g., Pieters, Baumgartner, and Allen (1995), Bagozzi, Bergami, and Leone (2003), and Canova, Rattazzi, and Webley (2005) appear to be suitable.

This research applies the ladder- ing technique. Actions goals are elicited using a scenario involving a generic level of decision making. Ladder- ing questions are applied to elicit higher order goals. As such advantages and limitations of the ladder- ing technique are embedded in this research. Section 4.3 provides a brief description of the generic goal-ladder- ing procedure.

3.2. The processes and backgrounds of data collection

3.2.1. Procedure and processes of data collection

Participants of this study were recruited from the administrative and support staffs of Gadjah Mada University, Indonesia. Gadjah Mada University is a state university. As such, the participants' are full-time employees of the government. Although they earn relatively lower amount of salary as compared to the private sectors, government employees enjoy relatively secure income and various benefits. They earn fixed amounts of income, and are entitled to government-sponsored pension programs. Basic health insurance and health services are provided to the employees and family members. A government employment status is also relatively respected in the society.

The participants work for the central administrative office and several faculties of Gadjah Mada University. Participation in the data collection was voluntary and no reward was offered for the participation in the survey. Permission for data collection was obtained from the personnel department of the university. Subsequently the office provided information regarding name and work unit. In addition, the office provided an accompanying letter stating the permission for conducting the data collection as well as the vountary nature of participation in the survey. In addition, the letter stated that the questionnaires should be completed outside office hours.

Questionnaires were sent to participants through their office addresses. A deadline for returning the questionnaire was stated in the cover letter. Data were collected in two waves. A period of approximately 2,5 months separates the two stages of data collection. Although all participants worked for the same univer-

sity, participants of the first data collection worked for the central administrative office, whereas participants of the second data collection worked for the faculty offices. The purpose of the first-wave data collection is mainly for the pilot study. Considering the quality of the data, this data set is used as an addition to the data obtained from the second wave. More of the examination into the data obtained from the first wave will be reported in Chapter 4.

Questionnaires for the first- and second-wave of data collection are exactly the same with regards to the goal elicitation procedure. Included in these questionnaires are the same questions regarding demographic backgrounds and the measure of consumer confidence. However, the first questionnaire incorporated the measure of consumer involvement, whereas the second questionnaire included instruments measuring the strength saving motives and attitudes toward saving and debt. Differences in these contents are made to keep the length of questionnaire within approximately 45 minutes to complete. Appendix A.1. and Appendix A.2. represent the questionnaires used in the first and the second waves of data collection, respectively.

There were 244 questionnaires sent out in the first wave, and 490 in the second wave of data collection. Total numbers of the returned questionnaires are 187 and 279 for the first and second waves, respectively. However, there were 43 questionnaires which were returned blank, bringing the final number of data consisting of 423 participants (approximately 58% response rate). This response rate might be considered very good, especially with the voluntary and no-paying nature of the survey. However, such level of response rate is quite common in survey researches in Indonesia.

3.2.2. Social, economic and political backgrounds to the data collection

The data was collected in Indonesia in from the last quarter of 2006 to the first quarter of 2007. Historically, the Indonesian economy has gone through rapid economic growth until a decade before the data collection took place. From 1997 Indonesia experienced a deep economic crisis that also swept over the regions of South-East and East Asian countries. Economic recovery and steady growth have just been achieved in the last 2 years when the data collection was carried out. The images of unemployment and inflation certainly remain to linger in the minds of the participants.

During the year the data were collected, the economy grew by 5.5%. Inflation rate in the preceding year was 6.6%. The average base of interest rate of the Central Bank, the Bank Indonesia, in the preceding year was 12.75%. However, in January 2007 it dropped to 9.50%, then it became 9.25% in February and

March. The exchange rates were stable throughout the period of data collection, which for many people indicated that the economic and financial situations were secure. Overall, economists agreed that the economic growth and macroeconomic situations were strong.

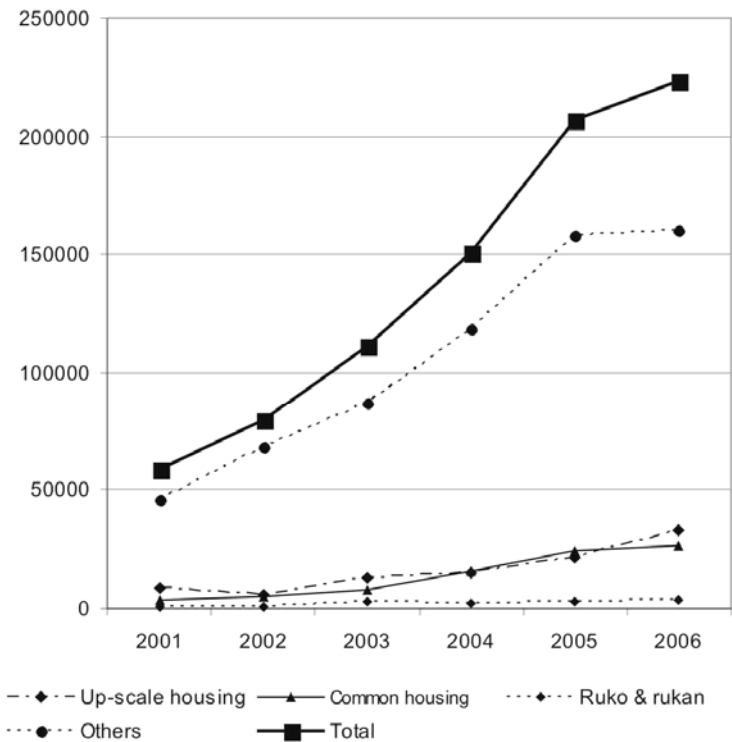


Figure 3.1.The growth of consumer credits in Indonesia 2001-2006 (Astono, 2007).

In the microeconomic sector, consumer credit grew continuously during the last five years preceding the data collection. According to Astono (2007), the total consumer credit in the last 6 years grew almost by fourfold, that is, from 58,598 trillion Indonesian rupiahs in 2001 to 223,387 trillion in November of 2006. The highest increase was recorded at the up-scale housing credit, with a 800 % increase. The second highest increase was credit on *ruko/rukan* (houses in which the basement is used for a shop or an office and the upper floors are for residence), with a 535% increase. Common housing credit grew with 375% over the period. Other consumer credits, including automotive, electronic and credit card, which was the largest contributor to consumer credit, grew by 350%.

In contrast to macroeconomic indicators and consumer credit, a survey by a national newspaper indicated pessimism among people. According to Suryaning-

tyas (2007), most people were not confident that there will be significant improvement in most aspects of life, such as political stability, economy, security, law enforcement, social welfare, freedom of speech, prices, employment, fight against corruption, health service, education, environment, and freedom of faith and religion. More over, the majority of the respondents (around 63%) believed that the government will not be capable of handling problems related to politics, economy, law enforcement, social welfare, and natural disaster. The survey was carried out in 10 major cities of Indonesia.

To summarize, although macro- and microeconomic indicators showed optimistic sentiment at the time that data collection processes were conducted, subjective data indicate low confidence in the ability of the government to handle important problems among the Indonesian population.

3.3. The questionnaire and the data

Data were collected using a means of questionnaire. There are four types of questions included in the questionnaire. The first, which constitutes the major data for this research, concerns goal-laddering questions to elicit consumers' generic goals. The second part of the questionnaire concerns psychological constructs, namely consumer confidence, consumer involvement in saving and spending, attitudes toward saving and debts, and the strength of their saving motives. The third part concerns questions regarding household economy and economic behaviour. Finally, the questionnaire also comprises of several questions regarding social-demographic status of the participants. Contents of each part of the questionnaire and the data are described briefly herein, after a section on the socio-demographic backgrounds of the participants. The questionnaire in the Indonesian language can be seen in Appendix A.

3.3.1. Participants

The demographic background of the participants, and the comparison between the two waves of data collection, are summarized in Table 4.1. As apparent from the table, the average age of participants in the first data collection is slightly higher than the second group. However, they are both in the middle forties, hence approximately at the same stage of the life-cycle. The gender and educational backgrounds of the two groups are reasonably similar. However, the education level of the first group is slightly higher than the second group.

Overall, the average age of the participants is almost 46 years, ranging from 25 to 56 years of age. With regards to gender, 73% are male. The formal educational background is as follows: 3% elementary school, 11% junior high school,

51% senior high school, and 35% university. All of the participants are married, with the majority having 2 children. Only three percents earn less than one million Indonesian rupiahs, whilst the majority (61%) earn between one and two million Indonesian rupiahs (approximately between 100 and 200 euros) per month. There are three percent of the participants whose monthly income level is higher than five million Indonesian rupiahs.

Table 3.1. Demographic backgrounds of the participants

Social-demographic background		Wave 1	Wave 2	Total**
Age (average)		45,78	42,69	88,47
Gender	Female	47 (27%)	58 (24%)	105
	Male	126 (73%)	181 (76%)	307
	<i>Total</i>	<i>173</i>	<i>239</i>	<i>412</i>
Education	Elementary school	5 (3%)	9 (4%)	14
	Junior high school	18 (11%)	21 (9%)	39
	Senior high school	87 (51%)	136 (58%)	223
	Bachelor degree	57 (34%)	60 (26%)	117
	Master's degree	2 (1%)	8 (3%)	10
	<i>Total</i>	<i>169</i>	<i>234</i>	<i>403</i>
Children	0	5 (2.9%)	1 (0.5%)	6 (1.5%)
	1	17 (9.9%)	48 (21.9%)	65 (16.7%)
	2	91 (53.2%)	106 (48.4%)	197 (50.5%)
	3	41 (24.0%)	45 (20.5%)	86 (22.1%)
	4	17 (9.9%)	15 (6.8%)	32 (8.2%)
	≥ 5	0	4 (1.8%)	4 (1.0%)
	<i>Total</i>	<i>171</i>	<i>219</i>	<i>390</i>
Income level (Rp*)	< Rp. 1 million	5 (3%)	57 (25%)	62
	Rp. 1 – 2 million	102 (61%)	109 (48%)	211
	Rp. 2 – 3 million	38 (23%)	41 (18%)	79
	Rp. 3 – 4 million	12 (7%)	12 (5%)	24
	Rp. 4 – 5 million	6 (4%)	7 (3%)	13
	Rp. 5 – 7,5 million	3 (2%)	2 (1%)	5
	Rp. 7,5 – 10 mil.	0	1 (0%)	1
	> Rp. 10 million	2 (1%)	0	2
<i>Total</i>		<i>168</i>	<i>229</i>	

Note:

* Rp. stands for Indonesian Rupiah. The exchange rate when the data was collected was approximately Rp. 11,000 for €1,00 euro.

** Total number of specific may not add up to the total participant, due to missing information.

3.3.2. The generic goal-laddering procedure

Generic goals were elicited by using the generic goal-laddering procedure (see Chapter 4). It consists of three parts, namely the generic level decision-making task, the procedure for eliciting action and focal goals, and the procedure for eliciting goals of the higher levels. The decision-making task is presented through the means of a scenario involving a windfall income in the amount approximately equal to the average monthly income of the participants. Action and focal goals is elicited through two direct questions regarding what would the participant like to do with the money and what they would like to achieve with that action, respectively. Goals of the higher levels were elicited using the three-level goal-laddering questions. Overall, each participant can mention up to nine chains of generic goals, each chain consists of action, focal, and higher level goals.

Observation on the data shows that there are no significant differences between the data collected in the first and second waves. Both contain similar number of responses per participant. For example, the average number of goals mentioned by each participant is 19.26 and 19.34 goals, for wave 1 and 2, respectively. The number of goal chains per participant was also highly similar, totaling 5.64 and 5.63, respectively. When the comparisons are brought to the more specific aspects of the data, consistent similarity remained. For example, the first and second question produces 5.64 and 5.49 responses on the wave 1, and 5.63 and 5.52 on the second wave. The first laddering question produces 4.66 and 4.59 responses per participant, followed by 2.77 and 2.76 for the second laddering question, and the third elicits 0.76 and 0.84 goals. The high similarity is also observed with regard to the average of the goal links that represent direct connections between two goals. Whereas data set 1 produces 13.63 links, data set 2 provides 13.75 links per participant. The similarities of the two data sets provide justification for combining them in the subsequent analysis. Important information regarding the data is summarised in Table 3.2.

Table 3.2. Summary of the data

<i>Data component</i>	Data Set 1 (N = 175)			Data Set 2 (N = 248)		
	Freq.	Mean*	% of total	Freq.	Mean*	% of total
Total goal	3390	19.26	100	4797	19.34	100
Question I	987	5.64	29.12	1397	5.63	29.12
Question II	960	5.49	28.32	1370	5.52	28.56
Laddering question I	815	4.66	24.04	1139	4.59	23.74
Laddering question II	485	2.77	14.31	684	2.76	14.26
Laddering question III	143	0.76	4.22	207	0.84	4.32
Goal-chain	987	5.64	100	1397	5.63	100
Direct connection	2385	13.63	100	3409	13.75	100

With regard to the combined data, the 423 respondents mentioned 8173 goals, or an average of 19.32 goals per participant. Table 3.2 also specifies the number of goals per ladder question and average number of response per participant. For example, there were 2384 goals mentioned for the first ladder question, averaging 5.64 goals per participant. An important feature is the significant drop of goals mentioned at the fourth and fifth ladder questions, with 10% successive drops for each. This data indicates that the four laddering questions are sufficient for most of the participants. This might reflect the level of complexity in the goal schema of the participant, or it may reflect the level of difficulty to work on a five laddering question. Content analysis of this data will be reported in Chapter 4.

3.3.3. Psychological variables

(1) Consumer confidence

Consumer confidence was measured using combinations of survey questions reported in Van Raaij & Gianotten (1990), and the DNB Household Survey. It consists of nine questions. The measure included the evaluation of the general economic situation over the last 12 months, expectation of the general economic situation for the next 12 months, evaluation of the personal household finances over the last 12 months, expectation of the personal household finances for the next 12 months, expectation of price increases, evaluation whether it is a good or bad time to buy durable goods, expectation of saving over the next 12 months, and rationality of saving considering the general economic situation. These questions are taken from van Raaij and Gianotten (1990). One question regarding expectations about unemployment was replaced by a question regarding evaluation regarding the appropriateness of buying durables at the current time. This question was taken from the DNB Household Survey.

Consumer confidence is scored using the following policies. If a participant responded “don’t know,” which is the last option on each of the nine questions, a missing value is assigned and the case will be dropped from further analysis. When a participant responded “no change” to questions number 1 through 5, a zero score (0) will be assigned. The same score will be assigned to the response of “just enough” and “so-so” for questions number 6 and 7. No comparable response and scores are relevant for the last two questions. Positive responses to each question, e.g., “it is becoming better”, will be scored positive 1. Conversely, a negative response will be scored negative. Score of the nine questions are accumulated. To avoid the total score being negative, a constant of 100 is added. The final score can be less, equal to, or more than 100.

(2) Consumer involvement in saving and spending

Following Katona (1975), consumer involvement in saving was measured on four contexts of saving, namely saving for emergencies, saving for retirement, saving for children and family needs, and saving for other purposes such as for purchases or other transactions. Involvement was measured on four seven-point semantic differential items, with the following end-poles: important -- unimportant, useful – un-useful, relevant – irrelevant, and essential need – non-essential need. These semantic differential items were selected from Zaichkowsky (1985) involvement instrument. The same approach is applied for measuring consumer involvement in spending. Consumer involvement consists of four types of spending, namely hedonic spending, spending in the context of trend and mode, spending on self-development, and spending for pro-social motives.

(3) Attitudes toward saving and debts

The measure for attitudes toward saving and debt were obtained from Nyhus (2002). The measure consists of 15 questions regarding aspects such as financial independence, family welfare, saving habit, saving socialization, and emotional involvement in saving and debt. The participants indicated how they agreed or disagreed with the statements by choosing a number from 1 to 7 where 1 means “totally disagree” and 7 means “totally agree”.

Table 3.3. Summary of the measures regarding the psychological variables and questions regarding household economic-financial situations

Measure	N	Scale		Mean	SD
Measure		Min	Max		
Consumer confidence	415	91	109	101.23	3.42
Involvement in saving	120	16	112	92.46	15.87s
Involvement in spending	124	16	112	71.90	17.54
Attitude toward saving	231	15	105	78.30	11.55
Strength of saving motives	236	5	35	30.42	4.53
Financial satisfaction	398	1	5	3.08	0.75
Ability to satisfy needs	401	1	6	3.20	1.25
Saving habit	374	1	7	4.23	1.27

(4) Strength of saving motives

The strength of saving motives measure was translated from Nyhus (2002). Participants were asked to indicate how important they regarded the different saving motives by choosing a number from 1 to 7, where 1 means “very unimportant” and 7 “very important”. The saving motives are concerned with saving for the increasing needs in the future, for retirement, for precautionary against contingencies, for future transactions, and as an investment.

3.3.4. Household economic and financial situations


Several questions regarding household economic and financial situations are also included in the questionnaire. These include:

- (a) Saving habits: the question was adapted from the DNB Household Survey 2004. The question reads as follows: “Some people spend all their income immediately. Others save some money in order to have something to fall back on. “Please indicate your position in the following scale!” The scale spans from 1 (“I like to spend all my money immediately) to 7 (“I want to save as much as possible”).
- (b) Perception of the ability to satisfy household needs: The question was adapted from the DNB Household Survey. The question runs as follows: “How well can you manage the total income of your household?” Six alternative responses were provided, namely: (1) it is very hard, (2) it is hard, (3) it is neither hard nor easy, (4) it is easy, (5) it is very easy, (6) don’t know. Any “don’t know” responses will be omitted from further analysis.
- (c) Satisfaction with household financial situations: The question runs as follows: “How satisfied are you with the current financial conditions of your household?” A five-point scale from very dissatisfied to very satisfied was provided.



Chapter 4

Examining the generic goal-laddering procedure



Summary. The objective of this study was to develop a procedure for goal-elicitation at the generic level of consumer behaviour, i.e., a generic goal-laddering procedure. The proposed procedure consists of a scenario of a windfall income and three stages of goal-elicitation questions. The results demonstrate that a moderate windfall income (i.e., a windfall income approximately equal to regular income) generates comprehensive variations in terms of action goals, namely saving, spending, investing, and debt repayment. The diminishing rate of response over the laddering questions indicates that the five-question procedure (i.e., two goals elicitation questions and three laddering questions) produces an exhaustive response. Furthermore, the elicited responses provide sufficient data to develop an implication matrix, a hierarchical goal map, and to examine the hierarchical properties of the generic goal system. Some additional results concern the linear association of the response rate with educational backgrounds and income levels of the participants. This may indicate that abstract reasoning and aspiration level are important factors in the generic goal systems of consumers. Overall, this study demonstrates that the generic goal-laddering procedure is appropriate for examining the structure and functions of the generic goal systems.

4.1. Laddering techniques

Chapter 3 suggests that laddering techniques as the appropriate method for eliciting generic goal systems. Laddering is a technique designed to elicit increasingly super-ordinate constructs (Walker & Winter, 2007). The method was originally developed by D.N. Hinkle, and was intended as a method to reveal super-ordinate personal constructs (Kelly, 1955), at ever higher levels of abstraction. The method is based on the personal construct theory and the associated repertory grid technique (Kelly, 1955, 1965), which assumes that people use bi-

polar constructs in representing people, events, objects, and circumstances. A bipolar construct represents the discriminations people make, that is, that some things are similar to each other, and different from the rest. Similarities and differences are the bases for people to categorize their world (McGarty, 1999), and thus to build up their understanding of their world (Kunda, 1999). For example, “hot” cannot be understood unless it is related to “cold.”

The repertory grid (Kelly, 1955) has been the main methodological instrument for uncovering personal constructs. According to Fransella (2003), Bell (2003) and Beail (1985), repertory grid refers to an interview technique mainly aimed at assessing personality from an idiographic approach. It consists of two parts. In the first part, the interviewee is asked about a number of people in their life, such as father, mother, teachers, best friends and most hated friends. Normally responses are limited to about 7 to 20. In the second part, the interviewer forms combinations of any three of the people mentioned. For each combination the respondent is asked to distinguish one person from the other two, based on anything that they consider important. For example, a respondent may consider one as lazy whereas the other two persons are diligent, or affectionate versus cold, or firm versus soft, and so on. These are constructs by which people understand or derive meaning out of their external world (i.e., people, in this case). Each construct consists of contrasting concepts, rather than just opposite concepts. From then on, various usages of the technique can be developed. For example, it can be used to determine ratings of individuals on the idiosyncratic constructs. Individual members of the group chosen by the interviewee are rated, for example using the scale of 1 to 7, on each of the constructs. To this extent, the repertory grid is less applicable in consumer research. However, it has contributed in terms of providing impetus for the idiographic procedure, and indeed a theoretical foundation of the procedure.

The original procedure of the laddering technique can be described as follows. First, bipolar constructs of similarity and difference are elicited. The triadic sort procedure (Kelly, 1955) is applied for the related elements, namely people, ideas, objects, or events that are familiar to the participant. The participant is asked in what way he thinks the two of them are similar, but different from the third. For example, when the element concerns product choice in a product category, for instance shoes, the participant may state that the two shoes are similar in terms of elasticity, as opposed to the third that is too stiff. This reveals a bipolar construct of elastic versus stiff. The laddering process goes on by asking the participants which ends of the resulting bipolar construct is more preferable and why is it so. The reason provides another bipolar construct. For example, if the participant answers that he or she prefers elastic shoes because it feels comfortable, he or she can be asked “As opposed to what?” The answer provides the op-

posite end for the construct of comfortable. In the next stage, the participant is asked the reason why he or she prefers “comfort” than the opposite construct. The process is repeated, resulting in a higher-level construct on every stage of the laddering question, until he or she cannot provide further reasons, or when he or she feels that that is the ultimate reason. The hypothetical result is demonstrated in Figure 4.1.

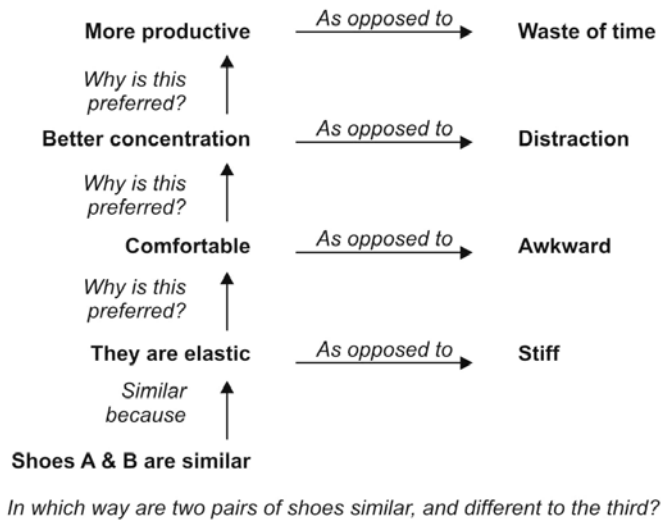


Figure 4.1. Example of hypothetical ladder.

The laddering technique has been applied widely in marketing and consumer behaviour research (Olson & Reynolds, 2001). The theoretical foundations are proposed in Reynolds and Gutman (1988). It is based on the means-chain theory of consumer behaviour (Gutman, 1982). The theory assumes that attributes of products or services are connected with consumers’ values through the benefits or consequences, that is, desirable or undesirable physiological and psychological results, accrued directly or indirectly from consuming the products or services. Thus, consumptions of products and services signify a means-end chain that consists of attributes, consequences, and values.

The laddering technique in consumer behaviour consists of two major parts. The first part concerns identification of salient attributes or functions of products or brands within a product category. Attributes can be identified through direct elicitation (i.e., participants are asked what attributes they perceive as distinguishing between brands of a product), triadic sorting as in Kelly’s (1955) repertory grid, or sorting task to elicit subjective or natural groupings of brands. Having established salient attributes, and making sure that the distinctive attributes

represent a bipolar construct, the second part of the interview is commenced. Participants are asked on which attributes they prefer. The preferred pole serves as the basis for asking “Why is it important for you?” The rest of the procedure replicates the original procedure outlined above.

The laddering technique in consumer behaviour is relevant for understanding super-ordinate goals of consumption. However, a significant portion of consumer behaviour concerns focal goals, in which consumers pursue or strive for a life project (Huffman, Ratneshwar, & Mick, 2000; Emmons, 1989). It is signified in a question of “What is it that I strive for?” (Taylor, Bagozzi, Gaither, & Jamerson, 2006). A laddering technique for eliciting super-ordinate goals of a focal goal is proposed in Pieters, Baumgartner, and Allen (1995). Bagozzi, Bergami, and Leone (2003) applied the same procedure for eliciting focal goals in an organizational behavioural context. In this procedure, focal goals are given and the laddering interview is focused on eliciting reasons concerning why it is important for the participant to achieve the given goal. An alternative procedure requires the participant to state whether they have the given goal or not (Canova, Rattazzi, & Webley, 2005). The laddering interview will be done only with participants who have the stated goal. An advantage of this variant of the laddering procedure is that it can be, and indeed it has been, done with self-administered questionnaire.

The laddering technique described above concerns bottom-up laddering processes. It is concerned with the question of why. Why a particular attribute, consequence, or value important to the individual. It provides a way for eliciting increasingly abstract motivational factors. As an alternative, Antonides and Van Raaij (1998) suggest a top-down laddering technique, which is the opposite of the laddering technique so far discussed. It is concerned with the question of “how.” For example, in the context of six levels of service, the laddering can be started with terminal values. “How could this terminal value be achieved?” The answer is likely to correspond with instrumental values. Then an instrumental value is picked up, and the following question arises: “How could this instrumental value be materialized?” Following the downward ladder that consists of terminal values, instrumental values, psychosocial benefits, functional benefits, abstract attributes, the final ladder will reveal the concrete attribute. To the best of our knowledge, there has not been any formal procedure developed on the top-down approach of the laddering technique. A comment might be put forward regarding the possibility that the top-down laddering approach may reveal more of the problem solving abilities rather than the goal systems of the interviewee.

From the overview presented above, it can be concluded that the laddering technique provides an avenue to tap into subjective constructions of the meaning of objects, events, and acts. In its application in consumer behaviour, the ladder-

ing technique provides a hierarchical account of the means-end chain of consumer behaviour that relates consumer objects or services with abstract goals and values. Thus, the laddering technique is suitable for a goal system theory that emphasizes hierarchical structure and means-end or instrumental-terminal structures (e.g., Gutman, 1982; Rokeach, 1973; Huffman, Ratneshwar, & Mick, 2000). The remaining question is to what extent the existing variants of laddering techniques are applicable for tapping into goal systems at the generic level of consumer behaviour. Whereas laddering procedures are obviously appropriate methods for eliciting goal systems, we can question the suitability of the contexts for which the existing laddering techniques are supposed to be applied.

Regarding this question, we consider that the original procedure of the laddering technique is more appropriate for the purposes of eliciting general constructs by which people make sense of their world, particularly in relations to the elements concerned. When the element pertains to a consumer object, the procedure would elicit the constructs preferable to the individual, the opposite constructs disliked by them, as well as the reasons for liking the particular construct, in an increasingly abstract fashion. Thus, the technique may be effective in eliciting the increasingly abstract constructs related to the bipolar concept, but it does not necessarily imply willingness or even goals to act upon the object. Rather, the resulting personal constructs fit more into the notion of personality as a general tendency in behaviour across situations and over time (e.g., Cervone, 2004). In contrast, the laddering technique for eliciting goals in product and service consumption (Reynolds & Gutman, 1988) is obviously more direct in the sense of eliciting the intentional factor. It constructs the consumption of consumer objects in terms of goal attainment, in which the consumed attributes of products and services function as means for achieving consumers' goals and values. The disadvantage of this particular variant of the laddering technique, with regards to the generic level, concerns the level of consumer behaviour it is supposed to work for. The laddering technique of product consumption is more suitable for the specific level of consumer behaviour, in which the objective is to understand consumer goal systems in a brand preference.

The procedure proposed in Pieters, Baumgartner, and Allen (1995) and Bagozzi, Bergami, and Leone (2003) come closer to the characteristics of the generic level of consumer behaviour. A critical characteristic of this procedure, is that it deals with only one focal goal, whereas the generic level of consumer behaviour may involve multiple focal goals. Thus, adjustments may be made in the sense of allowing participants to state the goals they would like to pursue in a given generic allocational context. Laddering interviews are to be focused on the stated goals, in the same manner as in those two procedures. The procedure might be called a generic goal-laddering procedure.

4.2. Rationale of the generic goal-laddering procedure

The generic goal-laddering procedure is proposed for eliciting goal systems in a generic level of consumer behaviour. The hierarchical structures of consumers' goal systems are elicited using a laddering questionnaire. The procedure begins with the presentation of a representative context of the generic level of consumer decision-making. A context of the generic level is defined as the presence of an unallocated consumer resource, such as money, time, and power. Generic plans are then elicited. For each of the plan, the participants are asked to specify the goals they have in mind. Probing to each of these goals using a laddering questionnaire technique will elicit the hierarchical structures of participants' goal systems. The procedure can be visually illustrated as follows in Figure 4.2.

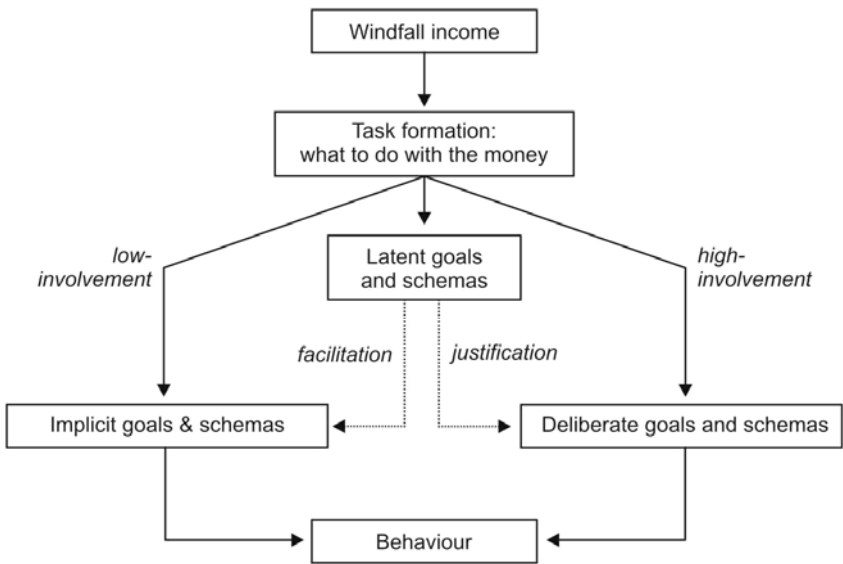


Figure 4.2. Goal establishment processes in a generic level of consumer behaviour.

The sequence of the procedure appears to be contradictory with rational decision analysis processes. In a rational process of goal pursuit behaviour, alternatives are generated following the formulation of a problem, i.e., generic problem. Costs and benefits of each alternative are calculated. Alternatives with highest utility are chosen (e.g., Baron, 2000). The proposed sequence also appears to be contradictory with goal setting processes (e.g., Gollwitzer, Heckhausen & Ratajczak, 1990; Locke & Latham, 1990). Goal setting starts with problem formulation: "What are the goals I can pursue and why do I want to pursue them?" Formation of a goal intention follows, "What is it for which I strive for?" The final part is action planning which concerns the questions of "How can I achieve

my goal” or “When, where, how and how long should I act?” Following this process are processes of goal pursuit which provide a feedback loop to the goal setting processes (Taylor et al., 2006).

The rational sequence is not adopted because it provides little representation of the self-regulatory mechanisms in consumer behaviour. The only goal is maximizing utility and the only process is the rational deliberation process (e.g., Baron, 2000). In contrast, people use heuristics in the processes of making judgments and adopt decision-making strategies that deviate from normative rules (e.g., Gilovich, Griffin, & Kahneman, 2002; Gigerenzer & Todd, 1999; Kahneman, Slovic, & Tversky, 1982; Kahneman & Tversky, 2000). The goal-setting processes may be better reflecting the psychological processes of goal-pursuit behaviour. However, goals in the models of goal-setting theory are given, suggested, or “sold” (Locke & Latham, 1990) to the subject. In contrast, people have to establish what goal they want to pursue in a decision-making generic allocation of a consumer resource.

The goal-setting theory might be characterized as representing a top-down approach in goal-directed behaviour. The individual is assumed to make an elaboration in concrete steps for achieving a goal. In a generic context, however, it is more likely that the reverse order is the case. People start with what they want to do or what they ought to do, and then seek for justifications for the things they eventually opt to do. Choices with salient justifications are preferred (Olsen, 2004; Shafir, Simonson, & Tversky, 1993). In conjunction with goal-based choice theory (Van Osselaer et al., 2005), latent goals provide justifications for the individual. This view implies that all goals are inherent in the memory of the consumers and simply acts as a lying dormant, waiting for activation (Austin & Vancouver, 1996). Goals become active or salient when the individual encounters stimuli that match or overlap sufficiently with these goals. The activation of a goal will activate other goals through a mechanism of spreading activation, bringing a goal schema to become active (Bagozzi, Bergami & Leone, 2003). Activation of a goal may refer to change in the level of accessibility from zero, a change in importance from zero, an increase in activation strength in a network, or a conversion of needs into a goal (Austin & Vancouver, 1996). Thus, decision-making at a generic level of consumer behaviour reflects concrete goals (i.e., what people believe they want or ought to do) and latent or super-ordinate goals (i.e., what they believe they can achieve through a concrete act).

These views also imply that decision-making and goal establishment follow automatic and deliberate processes. The presence of a spare consumer resource, for example windfall money, discharges affective valence. The release of affective valence causes changes in the accessibility of dormant goals from zero to positive

value and increase activation strength in a goal schema. It is illustrated vividly in an extreme situation such as winning a lottery draw. People often express the feeling in expressions such as “I cannot believe it ...”, “I’m so glad ...”, or “I’m rich” It is plausible that the arousal created is proportional to the amount of the money, relative to wealth, and negatively proportional to expectancy. The larger the size of the income and the less it is expected, the higher the arousal that is experienced by the individual. It can be assumed that goal establishment is a means for releasing these arousals through consumption behaviour, i.e., spending, saving, investing, and repaying debt.

The affective valence stimulated by the windfall money creates a problem that is specific to the generic level of consumer behaviour. Consumers may or may not explicitly ask themselves: “What to do with the money?” This process provides the basis for the formation of consumption intention in the Huffman, Ratneshwar & Mick (2000) model. In a real situation, a consumer may frame the problem as “what do I want to do ...” or “what do I ought to do” Regulatory focus theory suggests that different task frame (*ought to* versus *want*) can lead to different behaviours (Higgins, 1996; Pham & Higgins, 2005). A self-regulatory focused on promotion, i.e., signified by *wants*, lead people to ideal motives. That is, people are focused on objects, events, and states that they desire to possess or to experience. In contrast, under self-regulatory focus on prevention, i.e., signified by *ought to*, people are more inclined toward their needs, responsibility, or moral obligation that they believe they ought to do (Kruglanski, 2006; Avnet & Higgins, 2006). There are individual differences as well as situational variability in the propensity of using promotion or prevention focus (Higgins, 2002).

The level of arousal may determine the process of goal establishment. The mediating factor is the degree of involvement in receiving the income. Money that was found on the street and money won from a lottery ticket purchased for fun are examples where consumer involvement is likely to be low. In contrast, a bonus received for hard work or money inherited from beloved parents is more likely to induce high involvement. In a goal-establishment process, windfall associated with high involvement will be processed through a conscious and deliberate route, whereas windfall associated with low involvement will be processed through automatic route. Figure 4.2 summarizes the model.

The notion of consumer involvement with income can be associated with the concept of mental accounting (Thaler, 1980, 1985, 1999), and its cognitive psychological interpretation (Henderson & Peterson, 1992). More specifically, an application of mental accounting in behavioural life-cycle theory (Shefrin & Thaler, 1988) produced the hypothesis of differential marginal propensity to save and to consume the windfall income. A low amount of windfall income, relative to

regular income, is associated with the current income account, in which it is spendable. Thus, a small windfall income is almost completely consumed. Moderate windfall income is associated with current asset account, in which the propensity to save and to consume are approximately equal. In contrast, future income is not consumed at all, since it is associated with a future income account. However, behavioural life-cycle theory does not take the effects of income sources into account. Built on the interpretation that mental accounting processes are the same as cognitive categorization processes, Henderson and Peterson (1992) demonstrate differences in the propensity to consume and to save windfall income according to the associated sources. We may assume that the characteristics of the sources, which are not specified in Henderson's and Peterson's works, can be simplified in terms of consumer involvement with windfall income. Hence, the propensity to save a high-involvement windfall income is higher than a low-involvement windfall income.

4.3. Summary of the generic goal-laddering procedure

The proposed generic goal-laddering procedure is a paper-based goal-laddering technique, following the example of Pieters, Baumgartner, and Allen (1995) and Bagozzi, Bergami, and Leone (2003). The procedure consists of four major components, namely the generic allocation problem, elicitation of action goal, elicitation of focal goals, and laddering elicitation of super-ordinate goals. Figure 4.3 illustrates the overall procedure.

Generic allocation problems and elicitation of action goals

Following the behavioural life-cycle hypothesis (Shefrin & Thaler, 1988), the amount of windfall income should be set at approximately the average income of the research participants. In addition, the effects of source of income (Henderson & Peterson, 1992) need to be taken into account. Thus, the windfall income should be presented in a manner that emphasizes neutral effect, unless the research is intended otherwise. Instructions regarding the background of the task can be presented as follows: *"Imagine that, in addition to the amount of money you have RIGHT NOW, you receive an extra"*

Following the background situation, the task should be briefly and clearly presented. The framing effects of the instruction, with regards to regulatory focus theory (Higgins, 1996; Crowe & Higgins, 1997; Pham & Higgins, 2005), have to be taken into account. The instruction may be designed to elicit promotion or prevention focused goals, depending upon the purpose of the study. In a neutral frame, the instruction may be read as follows: *"Think of your situation as it is RIGHT NOW. I would like to know what you are going to do with this extra money."* Three to five

alternative plans can be extracted from the participant. However, the more activities a participant supplies, the more work would be expected from her. Workloads that may decrease response rate need to be taken into account. In addition, the realistic variety of expenses that the money would allow can be taken as a parameter for ascertaining the number of responses.

Elicitation of focal goals

In the second stage, participants are presented with the question of: “*What would you like to achieve (with this act)?*” Although several objectives might be met out of one act, referring to the multifinality principle (Kruglanski et al., 2002), one response might be sufficient. With only one reason the subject would likely be able to state their most salient goal. In addition, reasons for choosing the ascertained goals can be pursued more economically, using series of laddering procedures.

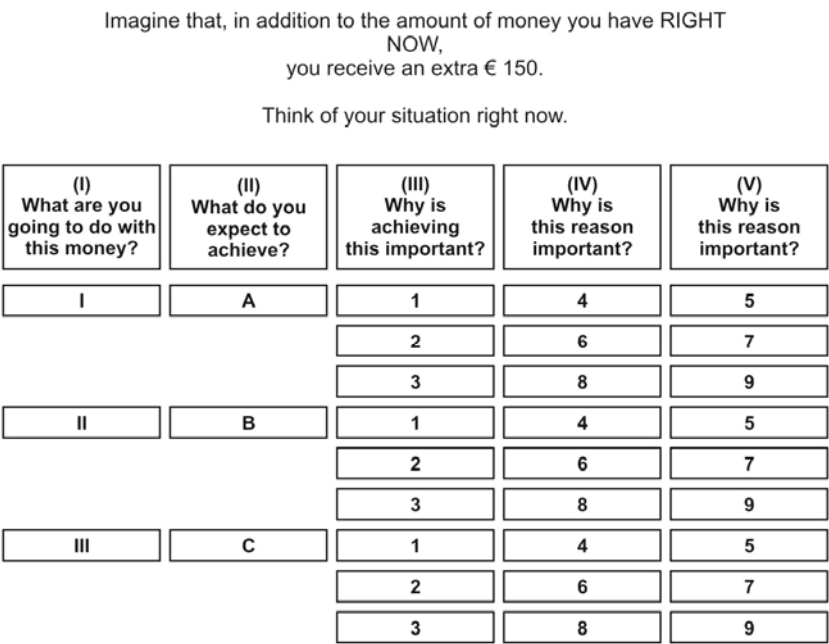


Figure 4.3. Diagrammatic illustration of the procedure.

Elicitation of super-ordinate goals

Thus, in the third stage, participants are asked the following question: “*Why is this goal important to you?*” Following the laddering techniques, subjects can be asked up to three to five reasons for each goal. The fourth-stage and fifth-stage of the procedure are basically the same as the procedure of goal-laddering (Pieters, Baumgartner & Allen, 1995; Bagozzi, Bergami & Leone, 2003). In these stages,

the question of “why is the reason important to you” is repeated in successive order. Thus, the complete procedure contains the following sequence: background and task presentation, followed by (denoted as →) elicitation of action goals (“*What would you like to do with this money?*”) → elicitation of focal goals (“*What would you like to achieve?*”) → elicitation of super-ordinate goals (“*Why is it important for you to achieve that goal?*”).

4.4. Examining the applicability of the proposed procedure

The objective of this chapter is to examine the applicability of the proposed generic goal-laddering procedure. First of all, the efficacy of the size of windfall income in eliciting concrete goals is examined. As saving and spending activities constitute the bottom of the generic goal system, it is assumed that sufficient variations in terms of these action goals will provide favourable evidence to the procedure.

The second objective of the study was to examine the response patterns over the elicitation and laddering questions. A basic question is whether the two goal elicitation questions and the three super-ordinate goal-laddering questions are sufficient for eliciting maximum responses from the participants. The decline in the response-rate per participant over the elicitation and laddering questions will provide indicative answers regarding this question. The lowest response-rate should be observed on the last laddering question. However, it should not be too low as to indicate the number of laddering questions should be fewer, or too high that may indicate that there should be more than three laddering questions. Unfortunately, specific reference on how to determine maximum combinations between response rate and the number of laddering questions is currently unavailable. Much of the conclusion therefore relies on the qualitative examination of the data.

The third objective is to examine the response patterns across demographic backgrounds of the participants. In particular, differences in response rate within the education and income levels of the participants were examined. Differences in response rates between participants of different educational backgrounds may indicate the level of abstract reasoning that the procedure requires. The higher laddering questions may require higher capacity in abstract reasoning, since the higher laddering questions are purported to elicit abstract goals or values. Thus, participants with a background the higher education level may be more able to provide responses to the higher laddering question. This conjecture can be tested against the data. That is, the conjecture is plausible if the patterns indicate that the level of education is associated positively with higher response rate, as compared to lower response rate, on the higher laddering questions, as compared to the lower laddering questions. On the other hand, differences in response rates

between participants of different income levels may indicate differences in the economic aspirations. Subjects with higher income levels are obviously more capable of affording different types of expenditures. Thus they may have more varieties of goals than the subjects with lower income. This may lead the higher income group to providing higher response rate as compared to the lower income group.

Finally, the goals elicited by the proposed generic goal-laddering procedure will be content analyzed. Categories of goals will be created, based on the examinations of a sample of the protocols. References to the relevant literatures will be done. However, in principle the generic goal categories will be developed to reflect the natural categories as much as possible.

4.5. Data and measures

Generic goals of the participant were elicited using the generic goal-laddering procedure explained above. Data from the first wave of data collection will be used for this analysis (see Chapter 3). The reason for not using the complete data is that this study was aimed as a pilot, before the full data collection was commenced.

4.6. Results

4.6.1. Response pattern analysis

The 175 participants mentioned 3390 goals, or an average of 19.26 goals per participant. These goals can be specified into the following components. First, 987 goals were mentioned for the first question, i.e., “What are you going to do with the money,” which means 5.64 goals per participant, or 29% of the total responses. The second question, i.e., “What would you like to achieve by this?” elicited 960 goals, which is equal to 5.49 goals per participant, or 28% of the total goals. The third question of the first ladder question (i.e., “Why is it important to you to achieve this?”) resulted in 815 goals, which is equal to 4.66 goals per participant, or 24% of the total responses. The second ladder question, i.e., “Why is this reason important to you?” resulted in 485 goals, that is, equal to 2.77 goals per participant or 14% of the total responses. The final ladder question, which is the repetition of the fourth ladder question, elicited 143 goals, or 0.76 goals per participant (4% of the total goals). With regard to goal connection, the 3390 goals made up of 2385 direct connections between goals (equal to 13.63 direct connections per participant). There were 988 original goal chains (equal to 5.65 goal-chains per participant). Table 4.1 specifies the number of goals per ladder question and average number of response per participant.

Table 4.1. Summary of the data

Data components	Frequency	Average/participant*	% of total
Total goal	3390	19.26	100
Question I	987	5.64	29.12
Question II	960	5.49	28.32
Ladder I	815	4.66	24.04
Ladder II	485	2.77	14.31
Ladder III	143	0.76	4.22
Total goal link	1212	6.93	100
Original goal-chain	987	5.64	81.52
Redundant goal-chain	213	0.18	17.57
Peculiar goal chain	12	0.009	0.99
Direct connection	2385	13.63	100

*) The total number of participant is 175

As apparent from Table 4.1, there are successive drops in the number of responses over the questions and the laddering questions. There is almost a 3% drop in the second question compared to the first. The third question, or the first laddering question, elicits approximately 15% fewer responses than the second question, or 17% response rate lower than the first question. The response for the second laddering question further drops by 68% from the first laddering question, or 51% drops of the first question. Finally, the third laddering question produces 71% fewer responses than the second laddering question, or 86% drops of the first question. The diminishing response rate is visualized in Figure 4.4.

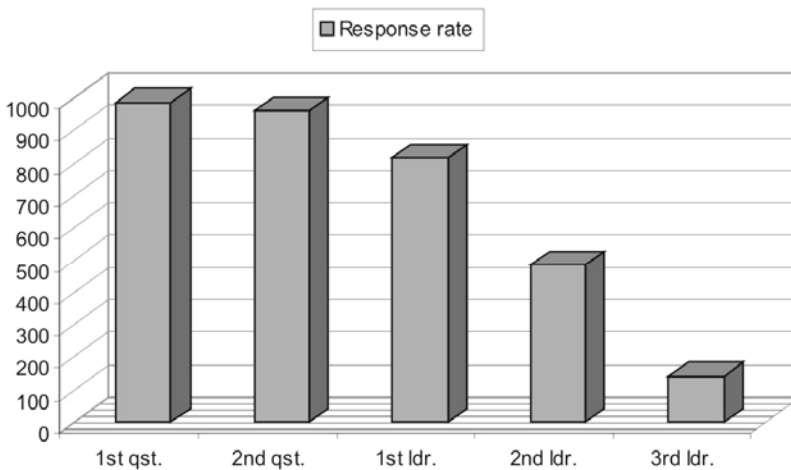


Figure 4.4. Number of responses per ladder question.

The laddering technique demands a certain level of capability for abstract reasoning. An abstract reasoning is developed through formal education. The higher

the level of formal education an individual has obtained, the higher his or her ability for abstract reasoning. In the laddering technique, the higher level of laddering question demands higher abstract reasoning. Therefore, it can be expected that participants with a higher level of formal education, as compared to the lower level, will provide a higher rate of responses for the higher levels of laddering questions, as compared to the lower level of laddering questions.

Table 4.2. Response rate on Question 1 (Q-1), Question 2 (Q2), Laddering 1 (L-1), Laddering 2 (L-2) and Laddering 3 (L-3) by level of education

Education level (N)	Question					Total
	Q-1	Q-2	L-1	L-2	L-3	
Elementary (5)	31 (6.2)	31 (6.2)	22 (4.4)	10 (2)	0 (0)	94 (18.8)
Junior high sch. (18)	93 (5.2)	89 (4.9)	69 (3.8)	36 (2)	11 (0.6)	298 (16.6)
Senior high sch. (87)	483 (5.6)	464 (5.3)	387 (4.5)	231 (2.7)	74(0.9)	1639 (18.8)
University (59)	356 (6.0)	353 (6.0)	318 (5.4)	196 (3.3)	56 (1.0)	1279 (21.7)

Note:
 Six participants did not mention education level. Hence the total number of participants (N) in this table is 169.
 Numbers in brackets indicate the average response per participant.

Table 4.2 contains the average number of responses on each level of the laddering question, specified by the levels of formal education attained by the participants. At the first ladder-question, participants with an elementary school background (6 years) provided 6.2 goals, which is higher than participants with the junior high school background (9 years), senior high school (12 years), and university. In respective order, the latest three groups provided 5.17, 5.55, and 6.03 goals. In contrast, participants with university education provided the highest level of response, which is 0.95 goal per participant, for the fifth ladder-question. Meanwhile, participants with elementary school education did not provide any goal at the third laddering question.

Figure 4.5 illustrates the response rate for each ladder-question by the educational background of the participant. University educated participants provided highest response rate per subject, except at the first and the second-ladder question. For these two ladder-questions, university educated participants were second to participants with elementary school education. Meanwhile, subjects with a junior high school background constantly provided fewer responses per subject as compared to the participants of senior high school education.

From this data, it can be roughly concluded that the ability for abstract reasoning influences the response rate. However, the interaction between educational level and level of income needs to be examined. An abstract goal represents higher level of motives in a goal-directed behaviour. The more abstract a goal the less it is related to concrete problems. For example, self-gratification is higher on the abstractness level than fulfilling basic necessities. Whereas fulfill-

ing basic necessities concerns concrete problems such as food and shelter, self-gratification might be achieved from an aesthetic experience or self-fulfilment. It is obvious that the ability for achieving higher level of goals is determined by income and wealth level. Income and wealth level, on the other hand, may be determined by educational level of the individual. This conjecture is indeed supported by the data. Education level correlates positively with income level, with $r = 0.424, p < 0.01$ ($N = 168$).

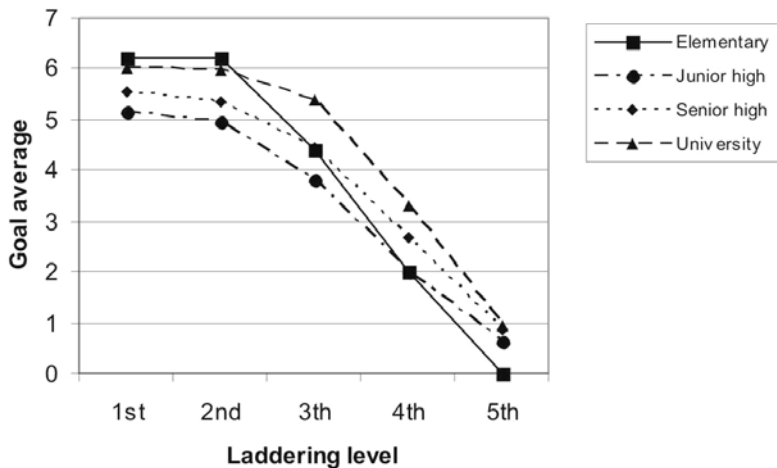


Figure 4.5. Average number of responses per ladder question by education level.

Table 4.3. Response rate on Question 1 (Q-1), Question 2 (Q2), Ladder 1 (L-1), Ladder 2 (L-2) and Ladder 3 (L-3) by income level

Income level	Question					Total
	Q-1	Q-2	L-1	L-2	L-3	
≤ Rp. 1 mil.* (N=5)	29 (5.80)	28 (5.60)	18 (3.60)	7 (1.40)	1 (0.20)	83 (16.60)
Rp. 1 mil – 2 mil (N = 102)	560 (5.49)	542 (5.31)	460 (4.51)	274 (2.69)	81 (0.79)	1917 (18.79)
Rp. 2 mil – 3 mil (N = 38)	222 (5.84)	217 (5.71)	188 (4.95)	114 (3.00)	34 (0.89)	775 (20.39)
Rp. 3 mil – 4 mil (N = 12)	70 (5.83)	70 (5.83)	58 (4.83)	31 (2.58)	8 (0.67)	237 (19.75)
Rp. 4 mil – 5 mil (N = 6)	35 (5.83)	35 (5.83)	30 (5.00)	22 (3.67)	5 (0.83)	127 (21.17)
≥ Rp. 5 mil (N = 6)	33 (6.60)	31 (6.20)	28 (5.60)	17 (3.40)	4 (0.80)	113 (22.60)

Note:
Seven participants did not supply information regarding their income level.
Mil stands for million, and Rp. stands for rupiah, the Indonesian currency.

To examine this conjecture, the average number of response for each ladder-question is specified by income level. There were six income levels, ranging from monthly income below one million Indonesian Rupiahs (approximately 100 Euros), to monthly income above five million Indonesian Rupiahs. Table 4.3 summarizes the data. Numbers inside the columns are the average response per participant.

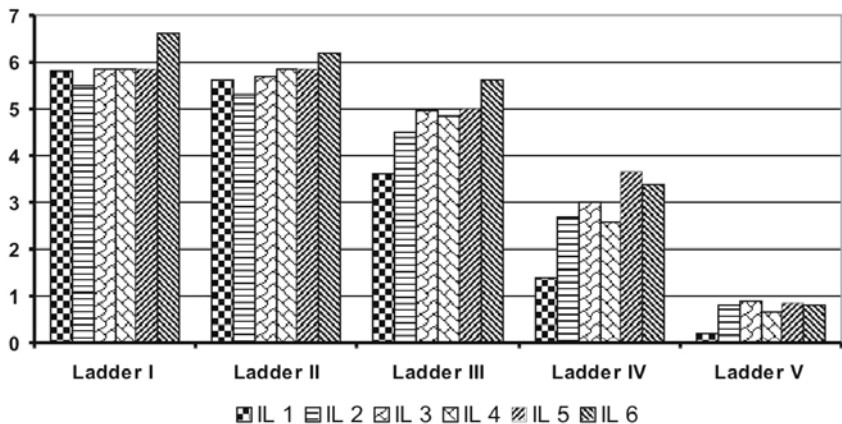


Figure 4.6. Average number of responses per ladder question by income level.

Figure 4.6 illustrates the data visually. In total average, the participants with higher income levels provided higher number of goals. With the average of 22.60, the highest income level provided six more goals than the lowest income level. But, the difference was not significant on the first and second ladder-questions. Significant patterns emerge from the third level of ladder-question upward. Compared to the lower income level, participants with higher income level stated more abstract goals.

4.6.2. Content analysis

To reduce idiosyncratic responses, data are content analyzed. The objective is to derive a small number of categories representing as much portions of the data as possible. A team that consists of the researcher and two independent coders inspected approximately 40% of the protocols. The inspection indicated high similarity of the content with some literature, e.g., Keynes (1936/1964) on saving motives, Katona (1975) on classification of major consumer money outlays, and Rokeach (1973) on values. Thus, 44 categories of responses partly based on these theories were developed (Table 4.4).

Table 4.4. Motives in economic behaviour

No.	Goals	Content
1.	To save	To save money in a bank or other ways. Examples: to save, to put it in the bank, to buy jewels.
2.	For insurance	To use money to buy or pay for insurance premiums. Examples: to buy life insurance, to buy health insurance.
3.	To invest	To use money in business. Examples: to add to capital on a business, to purchase seeds for farming.
4.	For housing	To use money on home and improvement expenses. Example: housing mortgage, to pay for rent, to renovate the house.
5.	For appliances	To use money to purchase appliances. Example: to buy furniture, to buy appliances.
6.	To repay debt	To use money to repay debt. Example: to repay the debt, to pay for credit instalments.
7.	For necessities	To use money to buy basic necessities. Example: to buy necessities, to improve nutrition, to buy clothes.
8.	For children	To use money on children expenses. Example: to pay school fees, to buy books for children, motor-cycle for children
9.	For secondary needs	To use on secondary needs. Example: for family recreation, for hobby, to entertain the family.
10.	For social expenditure	To use money in pro-social motives. Example: to help others, for donation, to help other families renovate their house.
11.	Savings accumulation	To accumulate savings. Example: to have savings, to add on savings.
12.	Being prepared	To be financially prepared on emergencies. Example: to get prepared for unexpected expenses, for future needs, reserve funds in case of emergency.
13.	Increasing expenditure	To get prepared for increasing needs. Example: inflating prices, children expenses are increasing.
14.	Improved life	To improve standard of life. Example: to be able to live better, to enjoy (the satisfaction of) secondary needs
15.	Assured retirement	For preparation towards retirement. Example: for retirement, reserve for retirement, for old age.
16.	Other goals	To satisfy goals not mentioned elsewhere. Example: for hajj (a pilgrimage in Islamic religion), for a marriage ceremony.
17.	Extra income	To earn extra income from interests or profit. Example: to earn higher income, to earn interest, for profit.
18.	Gift to children	To give money or properties to children. Example: to give savings to children, a gift to children.
19.	Having quality home	To have a better house to live in. Example: to have stronger house, healthier house, comfortable house.
20.	Comfortable life	To make life easier in general terms. Example: to do things with ease, to sleep better, to live comfortably.
21.	Being free of debt	To become free of debt. Example: being free of debt, debts are paid off, no longer in debt.
22.	Fulfilling basic needs	To fulfil basic needs. Example: sufficient nourishment, sufficient clothing.
23.	Money management	To manage financial matters. Example: to be able to manage finances, to be able to save (in the future).
24.	Medical care	To pay for medical costs. Example: to pay doctors, to buy medicines, to pay for hospital care.

25.	Children's competency	To have competent children. Example: to have knowledgeable children, skilled, well-mannered, moral.
26.	Good up-bringing	To provide children with a nurturing environment. Example: to help children concentrate on studies, to make children happy.
27.	Independent children	To have self-reliant children. Example: good future for children, independent children, successful children.
28.	Self-gratification	To enjoy self-gratification. Example: to get the family refreshed, to get the family entertained.
29.	Social relationship	To have a good social life. Example: to have a good relationship with others, with neighbours, with (extended) family.
30.	Being helpful	To being helpful to others. Example: to help others, to give relief to others, to contribute in social development.
31.	Happiness	To feel content with one's life. Example: to feel happy, to feel life being meaningful, to feel satisfied with how life is going.
32.	Hassle-free	To become free of unnecessary burdens. Example: to feel free of burden, to live peacefully.
33.	Spirituality	To enjoy spirituality. Example: to be prepared for the after life, to be blessed with rewards from God.
34.	Safe and healthy	To enjoy good health and a safe life. Example: to live long, to stay healthy, health is important.
35.	Just enough	To feel being fulfilled. Example: necessities are fulfilled, family members are well-nourished.
36.	Being productive	To be productive in work. Example: to be productive in work, to be more creative in work, to perform well.
37.	Recognition	To earn recognition from others. Example: to become a respected person, to earn social recognition.
38.	Self-realization	To realize one's potentials. Example: to achieve ambitions, to become successful, to be proud of one's self.
39.	Financial independence	To enjoy financial freedom in an old age. Example: not to become a burden to the family, not to become dependent of help from others.
40.	Family harmony	To enjoy a harmonious relationship in the family. Example: quality relationship in the family, harmonious family.
41.	Obedience	To fulfil one's obligation. Example: to be a responsible parent, to fulfil obligations.
42.	Prudence	To be careful with one's life. Example: to spend money wisely, to become cautious, not to become overspending.
43.	Social worthiness	To become a valuable member of society. Example: to become useful for the society, to become a good member of society.
44.	Social harmony	To enjoy harmonious society. Example: to have harmony in social life, to live peacefully with the society.

Having established the categories, four independent coders were then employed to code all of the responses. Coders were instructed to maximize similarities within a goal category, and maximize differences between goal categories (Bagozzi, Bergami & Leone, 2003). Each coder worked on around fifty percent of the protocols. Arrangements were made so as each protocol was examined by two coders. For example, Coder A examined protocol number 1 to number 90, Coder B examined protocol number 46 to number 135, Coder C examined protocol number 90 to number 175, and Coder D worked on protocol number 136

Table 4.5. Distribution of goal contents by laddering level

No.	Goals	Laddering level					Total
		I	II	III	IV	V	
1.	To save	356	0	0	0	0	356
2.	For insurance	12	0	0	0	0	12
3.	To invest	72	2	5	0	0	79
4.	For housing	106	10	5	0	0	121
5.	For appliances	76	1	4	0	0	81
6.	To repay debt	90	0	0	0	0	90
7.	For necessities	86	7	5	0	0	98
8.	For children	119	38	29	0	1	187
9.	For secondary needs	33	0	3	0	0	36
10.	For social expenditure	36	4	25	0	0	65
11.	Savings accumulation	0	28	12	4	0	44
12.	Being prepared	0	160	28	9	1	198
13.	Increasing expenditure	0	1	11	3	0	15
14.	Improved life	0	20	17	9	1	47
15.	Assured retirement	0	13	21	5	0	39
16.	Other goals	0	16	10	0	0	26
17.	Extra income	0	52	16	7	0	75
18.	Gift to children	0	1	4	2	1	8
19.	Having quality home	0	114	4	5	0	123
20.	Comfortable life	0	26	32	3	3	64
21.	Being free of debt	0	69	8	8	1	86
22.	Fulfilling basic needs	0	50	25	5	2	82
23.	Money management	0	66	31	8	0	105
24.	Medical care	1	5	29	6	0	41
25.	Children's competency	0	45	34	11	0	90
26.	Good up-bringing	0	41	19	8	1	69
27.	Independent children	0	27	46	25	5	103
28.	Self-gratification	0	48	11	5	0	64
29.	Social relationship	0	10	12	11	1	34
30.	Being helpful	0	20	1	8	0	29
31.	Happiness	0	4	14	30	10	58
32.	Hassle-free	0	37	71	64	21	193
33.	Spirituality	0	6	8	23	10	47
34.	Safe and healthy	0	12	52	36	9	109
35.	Just enough	0	9	67	42	14	132
36.	Being productive	0	2	14	28	6	50
37.	Recognition	0	3	17	8	3	31
38.	Self-realization	0	1	18	22	11	52
39.	Financial independence	0	2	13	11	9	35
40.	Family harmony	0	2	22	11	7	42
41.	Obedience	0	4	30	25	3	62
42.	Prudence	0	4	18	18	0	40
43.	Social worthiness	0	0	15	8	5	28
44.	Social harmony	0	0	9	17	18	44
Total		987	960	815	485	143	3390

to number 175 and number 1 to number 45. With this arrangement, for example, protocols number 1 to 45 were coded by Coder A and Coder D, whereas protocols number 46 to 90 were coded by Coder A and Coder B. The average of inter-raters agreement was approximately 85%. Discussions involving all of the coders were held to establish agreements on the goals that were coded differently on the initial stage.

In Table 4.5. the results of the coding are summarized, specified according to the laddering level. There were eleven categories of responses for the first laddering question, but one response appears to be idiosyncratic. The ten categories are to save, for insurance, to invest, to repay debt, for housing, for appliances, for necessities, for children, for secondary needs, and for social expenditures. In addition, goals mentioned in the first laddering question is relatively absent in the higher level of laddering questions. For example, there are only 62 and 76 mentions in the second and the third laddering-questions, respectively, of the goals elicited at first laddering question. This pattern demonstrates strongly that the first laddering question (i.e., "What are you going to do with this money?") elicits its concrete goals.

There are 38 categories of generic goals mentioned at the second goal elicitation question (i.e., "What would you like to achieve by this [way of spending the money]?"). The five goals most frequently mentioned are *being prepared* (160 responses), *having a quality home* (114), *being free of debt* (69), *just enough* (67), *money management* (66), and *extra income* (52). The third question, or the first laddering question (i.e., "Why is it important for you to achieve this?") elicits 815 responses, which consist of 41 different goal categories. The most dominant goals are *hassle-free* (71), *safe and healthy* (52), *independent children* (46), and *children's competency* (34). The second laddering question elicited nearly a half as much as the first laddering question, at 485 responses, in 33 different goal categories. The most dominant goals are *hassle-free* (64), *just enough* (42), *safe and healthy* (36), *happiness* (30), and *being productive* (28). Finally, the third laddering question which probes the reason why it was important to achieve goals, mentioned at previous laddering question, resulted in 143 responses. The responses consist of 23 goal categories. The most important goals are *hassle-free* (21), *social harmony* (18), *just enough* (14), *self-realization* (11), *spirituality* (10) and *happiness* (10).

4.7. Discussion

The main objective of this study was to examine the appropriateness of the proposed generic goal-laddering procedure for studies into the structure and functions of generic goal systems in the generic level of consumer decision making. Appropriateness of a generic goal-laddering procedure is considered in terms of

varieties in the elicited goals and the depth of associative networks between the elicited goals. It was expected that the variety of goals reflect the known categories of generic goals. It was considered important that the generic goal-laddering procedure should be able to elicit associative goals exhaustively. Given that introspection into one's goals requires a degree of abstract reasoning, it was expected that the response-rate to the generic goal-laddering procedure should vary with backgrounds of education. In addition, income level should be associated with consumers' aspirations, and therefore positively associated with response-rate.

As apparent from Table 4.1 and Figure 4.2, the level of responses drops successively over the five questions of the procedure. The second question contributed to only slightly more than 28% of all total response, which is approximately 1% less than the first question. However, the final question (the third ladder question) elicited only around 4% of the total responses, which is approximately 10% less than the fourth ladder question. This may indicate that the third ladder question, or the fifth question of the overall procedure, is the maximum point where significant proportion of the participants can be expected to respond. This finding corroborates observations in other studies, namely Canova, Rattazzi, and Webley (2005), and Bagozzi, Bergami, and Leone (2003). Thus, a five-question procedure that consists of two goal-elicitation and three goal-laddering questions appear to be the best solution.

With regards to the difficulty level, Table 4.2 and Figure 4.3 demonstrate that there are interaction effects between education level and the response rate. Except for the first question, participants with university education provided higher number of responses than participants with lower educational levels. Moreover, participants with elementary education did not provide any response on the final question, although they provided the highest number of response on the first two questions. However, the fact that there were only five participants with elementary education background may limit the interpretability of this pattern. Nevertheless, similar patterns can be seen among the middle-level educations. Participants of senior high school background consistently provided higher number of responses over participants of the junior high school backgrounds. Overall, it is apparent that education level influences the ability of the participants to provide responses. Considering the minor differences in the actual number of responses, however, this may not indicate prohibition for administering the procedure to the subjects of lower educational background. Moreover, education may not be the unique factor of the response rate. There was a significant correlation between education level and income level. The data show that participants with higher income levels provided higher number of responses. Taking this into consideration, aspiration level may explain the differences in the response rate across different educational backgrounds. Toward this end, there appear to be no

minimum requirements in terms of educational background of the subjects, at least above the elementary education level, for administering the procedure.

With regards to the content of goals, the procedure elicited 44 types of generic goals. There were ten types of goals mentioned at the first goal elicitation question. The ten types involved four categories related to saving, namely saving, repaying debt, investing, and purchasing insurance premium. Further six categories were related to spending goals, namely to spend on necessities (mainly food and clothing), housing, appliances, children expenditures (books, study apparatus, entertainment, etc.), secondary needs (hobby, sport, recreation and entertainment), and social expenditures. There was one participant mentioning spending on medical care. This might be considered a particular or ideosyncratic situation. Overall, the ten categories appear to represent the balance of saving and spending goals. Saving goals, represented by *to save*, *for insurance*, *to invest*, and *to repay debt*, accounted for 530 first-ladder goals, whereas spending goals accounted for 456 first-ladder goals. Thus, the use of a scenario of a windfall income in the amount approximately equals to the monthly income of the participants, as suggested by Shefrin & Thaler (1998), has produced a reasonable variation of consumer goals.

Given the variation and distribution of sub-ordinate goals as elicited through the first question, the remaining responses can be accepted as reflecting the goal systems for which the procedure was designed to tap off. Nevertheless, a brief overview on the elicited goals may add some weight on the assessment of the suitability of the procedure. Responses to the second ladder question, (i.e., “*What would you like to achieve [what the way use the money]?*”), were distributed in several themes. A large proportion is concerned with saving motives. Several classic motives of consumer behaviour emerged. For example, there were substantial numbers of responses that can be referred to as representing Keynes’ motives of saving (Keynes, 1936/1964). In particular, the precautionary saving motive, as represented in *being prepared*, was the most dominant. It was followed by other saving goals, namely *saving accumulation*, *assured retirement*, *other goals*, *improved life*, *earning extra income*, *money management*, and *being free of debt*. Other dominant responses concern spending goals. The dominant goals were *having quality homes*, *achieve comfortable living*, *fulfilling basic needs*, *developing children’s competency*, *providing good up-bringing for children*, *self-gratification*. These goals were also mentioned on the third ladder-question. However, the frequency was lower than on the second ladder-question. In addition, the content of these analysis indicate similarity to focal goals in previous studies on the hierarchical structure of consumer motives, e.g., Canova, Rattazi, & Webley (2005). Thus, it can be concluded that the second ladder-question elicited focal goals or intermediate goals.

Most of the goals mentioned on the second ladder-question were also mentioned on the third ladder-question. However, the balance between the two ladder-question could be identified. Goals such as *just enough*, *being productive*, *social recognition*, and *self-realization* were clearly more typical goals for the third ladder-question than the preceding ladder. However, the distinctions between the subsequent ladder-questions were not so obvious. Considering the content of these goals, it can be proposed that the third and the subsequent ladder-questions elicited super-ordinate goals or values.

The data obtained in this study can be processed to develop an implication matrix and hierarchical goal map, and computed to measure an index of abstractness and prominence. The implication matrix represents the frequency of direct linkages between two goals, both as origin and as destination of the linkages. It is an essential material for developing the hierarchical map, which is the visual representation of the implication matrix. The abstractness index indicates the relative position of a goal in the hierarchical structure of a goal system. The index of prominence is adapted from the social network analysis, and it captures the relative importance of a goal within the goal systems. Although all of these are very informative in terms of understanding the hierarchical structure of generic goal systems, analysing these aspects was beyond the scope of this study. Instead, the hierarchical structure of the generic goal system is the focus of the next chapter.


4.8. Chapter summary

The objective of this study was to develop a procedure for eliciting the generic goal system and to examine the suitability of the proposed procedure. From the literature review, a generic goal-laddering procedure was developed. The pilot study with 175 participants has provided positive results regarding the suitability of the procedure. The hypothetical windfall income of the procedure elicited balanced variations between saving motives and spending motives. The goal elicitation question has resulted in different types of intermediate goals associated with saving and spending motives. In addition, the laddering procedure has provided responses representing different types of super-ordinate goals or values. Analyses regarding the response patterns show that the 5-question procedure was suitable to optimally elicit the generic goal system. In addition, the procedure appeared to be appropriate for adult subjects of elementary or of a higher educational background. Thus, in general the generic goal-laddering procedure appears to be a suitable procedure for the current research purposes.



Chapter 5

Examining the structure of generic goal systems



Summary. Decision making at the generic level of consumer behaviour concerns choices between spending and saving. Each of these generic acts are associated with various goals, motives, and values, or simply consumer goals. How are consumer goals at the generic allocation level organized? By applying the generic goal-laddering procedure, the content analysis confirms four types of action goals, namely spending, saving, investing, and repaying debt. The descriptive analysis shows that generic goals are highly organized. Each of the goals above the cut-off level is linked directly or indirectly with every other goal, forming a unified schematic representation of generic goals. The abstractness indices demonstrate a clear separation of subordinate, intermediate, and super-ordinate goals. The intermediate and super-ordinate levels consist of goals that represent current concerns, life projects, life themes and values of the consumers. Moreover, goals and links between goals explain significant variance in consumer confidence. An indication of the moderating effects of income level and cultural background in generic goal systems are also identified.

5.1. Introduction

Decision making at the generic level of consumer behaviour involves choices between saving and spending, and certain combinations of the two generic acts (Antonides & Van Raaij, 1998; Van Veldhoven & Groenland, 1993). Further, saving is driven by many types of goals and motives (e.g., Keynes, 1936/1964; Browning & Lusardi, 1996; Katona; 1975; and Nijkamp, Gianotten & Van Raaij, 2002). The numbers of spending goals are even larger. Consumers spend their resources, almost infinitely on different kinds of things, each of which might be driven by a unique goal. Experts have introduced several dimensions of consumption, e.g., Khan, Dhar and Wertenbroch (2005), and Holbrook (1999), in

order to organize spending motives in fewer categories. In order to function effectively, it must be assumed that there is a certain organizational structure that encompasses saving and spending goals, and that the structural properties facilitate functional interrelationships between goals. To ease the discussion, we would address the organizational structure of saving and spending goals at the generic level of consumer decision making as the generic goal system.

The objective of this chapter is twofold. The first is to examine the structural properties of the generic goal system. Models of the organization of consumer goals discussed in Chapter 2, section 2.3, will be considered, i.e., the schematic model (Bagozzi, Bergami & Leone, 2003), the three-tiered goal hierarchy (Bagozzi & Dholakia, 1999), the means-end framework of consumer behaviour (Gutman, 1982), and the goal system theory (Kruglanski et al., 2002). Based on the established structural properties, the second objective of this chapter is to examine the construct validity of the generic goal system. Following previous investigations, i.e., Pieters, Baumgartner and Allen (1995) and Bagozzi, Bergami and Leone (2003), we propose that the construct validity of a generic goal system can be established in terms of nomological validity. This implies that the generic goal system should be accepted as a valid construct, to a degree that it is capable of explaining significant variance in a related, and has been proven, psychological construct. For this purpose, we relate the generic goal system with a measure of consumer confidence.

5.2. Data and measures

Generic goals are elicited using the generic goal-laddering procedure (Chapter 4). Data of the first and second wave of data collection will be used, see Chapter 3 for the complete description. Besides that, statistical analysis will also include measures of consumer confidence, as described in Chapter 3.

5.3. Results

5.3.1. Organization of the generic goals

Given the data, an implication matrix was developed (see Appendix C). An implication matrix displays the frequency of one-way direct connections, or linkages, between two goals. A convention is to read goals listed vertically as the origin, and goals listed horizontally as the destination of the linkages of every two goals. For example, *to save* (goal number 1) is the origin of 12 linkages with *to invest* (goal number 3). The total numbers that a goal serves as an origin of the linkages with all other goals, which is designated as *in-degrees*, is summed up in the last column of the implication matrix. For example, *to save* is the origin in 813 linkages. The total number a goal serves as the destination of all other goals,

or *out-degrees*, is listed in the last row of the matrix. In this case, *to invest* is the destination in 31 linkages with other goals. Because of the asymmetry in *in-degrees* and *out-degrees*, an implication matrix is not a symmetrical table. That is, the upper diagonal of the matrix is not the mirror of the lower diagonal.

Table 5.1. Statistics for determining a cut-off level

Cut-off	(1) Number of active cells	(2) Number of active cells as a proportion of all cells	(3) Number of active cells as a proportion of all cells mentioned at least once	(4) Number of active linkages	(5) Number of active linkages as a proportion of all linkages
1	728	0.38	1.00	5794	1.00
2	481	0.25	0.66	5547	0.96
3	371	0.20	0.51	5327	0.92
4	277	0.15	0.38	5045	0.87
5	225	0.12	0.31	4837	0.83
6	194	0.10	0.27	4682	0.81
7	170	0.09	0.23	4538	0.78
8	143	0.08	0.20	4349	0.75
9	133	0.07	0.18	4269	0.74
10	122	0.06	0.17	4170	0.72
11	105	0.06	0.14	4000	0.69
12	92	0.05	0.13	3857	0.67
13	85	0.05	0.12	3773	0.65
14	78	0.04	0.11	3682	0.64
15	75	0.04	0.10	3640	0.63
16	71	0.04	0.10	3580	0.62
17	65	0.03	0.09	3484	0.60

An implication matrix can be used to produce a visual representation of a goal structure, henceforth a hierarchical goal map (HGM). A HGM visually represents all linkages in the implication matrix, that is, all cells containing goals connections of at least 1. However, when the number of goals involved is relatively large, there will likely be too many different types of linkages being represented. As a result, the map might become cluttered with too many lines, and becomes incomprehensible. An alternative way is to represent only the dominant orientations in the goal structure (Pieters, Baumgartner & Allen, 1995), based on a certain level of cut-off. For example, the HGM in Cannova, Rattazzi and Webely (2005) represents direct connections that are mentioned at least 5 times, or a cut-off level of 5. Such practice can be compared to using higher scales in mapping a country, in which reference to small lanes and house numbers are omitted. Connections in the goal structure below the cut-off level are comparable to specific street addresses; they represent individual cases rather than general orientations of the goal structure.

Pieter, Baumgartner & Allen (1995) suggest a heuristic on determining the cut-off level. The principle is to account for a large proportion of the total number of linkages between goals with a relatively small number of cells in the implication matrix, which means a small number of lines in the goal map. Table 5.1 contains the main considerations for the method. A cut-off of 1, which means all linkages will be represented, will contain 728 lines, which is the same as the number of active cells (columns 1 and 3) and represents all linkages (columns 4 and 5). Increasing the cut-off level to 2 will reduce the number of lines to 481 (column 1), at the cost of only representing 66% of all connections, but still keeping 96% representation of direct linkages. Trading-off the number of linkages (column 1) with the representativeness to the maximum number of lines (column 3) and the representativeness to total linkages (column 5) indicate that a cut-off of 17 is acceptable. The goal map will represent 9% of all connections (65 lines) which is equal to 60% of the total active linkages between goals (3580 direct connections). To compare with other studies, Pieters, Baumgartner & Allen (1995) explain 72% of the total connections with 13% of all possible cells, and Taylor et al. (2006) explain 68% of all connections with 27% of all active cells in one study, and 66% with 25% in the other study. Although the cut-off level might be considered high, but it is acceptable considering the complexity of the goal systems that are measured.

Figure 5.1 represents the goal map. The map contains arrows, with each arrow indicating the direction of relationship between two goals (i.e., whether as an origin or destination). Seven goals are purely origins of the goal systems, namely *to save*, *for necessities*, *to repay debt*, *to invest*, *for appliances*, and *for secondary needs*. These goals may represent action, sub-ordinate, or means goals of the generic goal system. In contrast, *independent children*, *spirituality*, *being productive*, *social harmony*, *family harmony*, *happiness*, *prudence*, *assured retirement*, and achieving *other goals* represent the purely destinations of other goals. As such, these goals may represent end-states, terminal, or super-ordinate goals of the generic goal system. Numbers that are attached to the lines represent the strength of relationship. The analysis on the structural properties of the generic goal system at the next section should confirm whether a goal functions more as a sub-ordinate, intermediate, or super-ordinate level of the hierarchical structure of the generic goal system.

As it is apparent from Figure 5.1, goals of consumer goals at the generic level are highly organized. All 36 goals in the map are interconnected directly and indirectly through 65 lines. For example, *to save* is connected directly and indirectly with 27 other goals through 38 lines as the origin of all goal linkages. Overall, interconnections between goals starting from *to save*, account for 75% of all goals in the generic goal system. There are 7 goals directly connected to *to save*, namely *spending for children*, *saving towards other goals*, *saving towards assured retirement*,

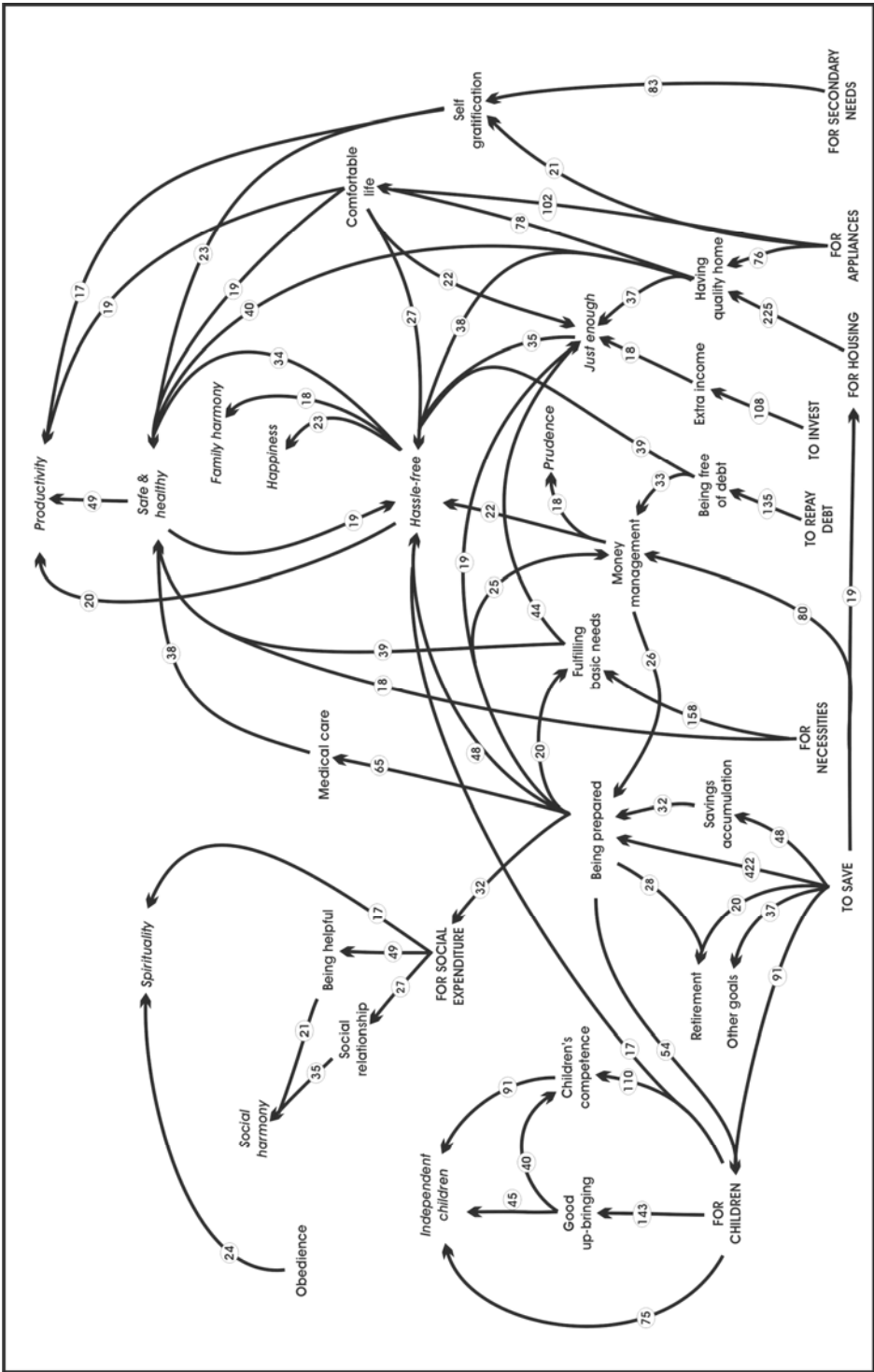


Figure 5.1. Hierarchical goal map of the generic goal system

savings accumulation, saving against unexpected adverse events (i.e., *being prepared*), saving as a form of *money management*, and saving *for housing* in the future. Furthermore, 14 goals are connected indirectly to *to save*, and 12 goals are in the third-degree of indirect connections with *to save*, and 5 goals in the fourth-degree of indirect connections.

As it is apparent from Figure 5.1, goals of consumer goals at the generic level are highly organized. All 36 goals in the map are interconnected directly and indirectly through 65 lines. For example, *to save* is connected directly and indirectly with 27 other goals through 38 lines as the origin of all goal linkages. Overall, interconnections between goals starting from *to save*, account for 75% of all goals in the generic goal system. There are 7 goals directly connected to *to save*, namely *spending for children*, *saving towards other goals*, *saving towards assured retirement*, *savings accumulation*, *saving against unexpected adverse events (i.e., being prepared)*, *saving as a form of money management*, and *saving for housing* in the future. Furthermore, 14 goals are connected indirectly to *to save*, and 12 goals are in the third-degree of indirect connections with *to save*, and 5 goals in the fourth-degree of indirect connections.

Notice that saving goals are interconnected with spending goals. At the bottom of the hierarchical structure, printed in capital, are concrete goals, namely *saving*, *investing (i.e., to invest)*, *borrowing (i.e., to repay debt)*, and *spending (i.e., for children, for social expenditure, for housing, for necessities, for appliances, and for secondary needs)*. Saving goals are directly connected with two types of the spending goals, namely *for children* and *for housing*. *Being prepared*, which is an intermediate level of the hierarchy of saving goals, is connected with two spending goals of the concrete level, namely *for children* and *for social expenditures*. Saving goals and spending goals are completely integrated at the intermediate and top levels of the hierarchy. The boundaries of the two supposedly different goal systems are hardly observable. This suggests that generic goal systems integrate competing motives, and therefore provide a mechanism for weighing choices at the generic level of consumer decision making.

Notice also that there are several clusters of goals. From the left hand side, spending on children education is rather separated from the rest, as well as goals related to social relationship. In the main part of the system, *being prepared*, *hassle-free*, and *just enough* appear to be central in relations to other goals. This may indicate centrality of certain goals in the consumers' goal system. Another interpretation is that clusters of generic goals may represent specific schemas of consumer behaviours. For example, children- and social-related goals may involve relatively specialized information-processing and specific decision-making functions of the consumers. Whereas this study is not in the position to examine the conjecture

on schemas specificity, the analysis at the next section should confirm whether the observation on the goal centrality corresponds with the relative positions of these goals on the index of goal prominence.

The next highlight concerns the directness and indirectness patterns of the goal linkages. Two goals might be both directly and indirectly connected. In Figure 5.1 we can find *to save* to be connected directly with *for children*, *retirement* and *money management*. However, *being prepared* also mediates in the indirect connections of *to save* with each of these goals. Other patterns include *for children* and *independent children* and *children's competence* with *good up-bringing* as a mediator. Also, *for necessities* → *safe and health* with *fulfilling basic needs* act as a mediator (note: → denotes direct linkages where goal at the left hand side is the origin of the goal at the right hand side); *good up-bringing* → *independent children* with *children's competence*; *to save* → *being prepared* with *savings accumulation*; *being prepared* → *hassle-free* with *money management*; *comfortable life* → *hassle-free* with *safe and healthy*; *being free of debt* → *hassle-free* with *money management*; *hassle-free* → *being productive* with *safe and health*; *having quality home* → *safe and healthy* with *comfortable life*; and *having quality home* → *hassle-free* with *just enough*, *comfortable life* and *safe and healthy* as mediators. It is interesting that *having quality* is directly connected with *hassle-free*, but three other goals also function as mediators. This may support the notion of cognitive schema of the generic goal system. On the other hand, the patterns that involve *being prepared* as a mediator of the direct connections between *to save* and *for children*, *assured retirement*, and *money management*, and *to save* → *being prepared* with *savings accumulation* as a mediator, suggests a behavioural schema of the direct and indirect relationship. That is, in practice consumer accumulate savings in order to get prepared financially, and that being prepared financially will allow one to better anticipate retirement, future needs of the children, and will demonstrate better money management.

Whereas most of the linkages involve one-way direct connections, there are two cases where the linkages involve two-way direct connections. The two cases are *being prepared* → *money management* (25) and *money management* → *being prepared* (26), and *hassle-free* → *safe and healthy* (34) and *safe and healthy* → *hassle-free* (19). This may represent an anomaly in the information-processing and decision-making process, since it leads to endless processes of feedback loop. However, a hierarchical goal map as shown in Figure 5.1 represents aggregated goal systems of individuals. The goal map may simply combine two types of the direct linkages from different individuals. Thus, the endless feedback loops do not represent individual cases.

In terms of content, several focal goals of saving, suggested in the literature, appear in the generic goal system. These focal goals related to saving include goal

saving motives (e.g., *for children, for housing, and other goals*), retirement, precaution, wealth accumulation, and investment motives. With regard to spending goals, both utilitarian and non-utilitarian motives are represented. For example, the utilitarian motives concern *for appliances, for housing, for necessities, and for children* and the focal goals such as *having quality home, developing children's competence, and fulfilling basic needs*. The non-utilitarian motives are relatively smaller in number than the utilitarian. Figure 5.1 shows that non-utilitarian motives are likely evident in *for secondary needs* which leads to *self-gratification, and comfortable life*. The disproportionate number of utilitarian and non-utilitarian goals may correspond with the relatively low level of discretionary income of the participants.

The cognitive-motivational schema of *hassle-free* may indicate the relative importance of utilitarian motives in the generic goal system as exhibited in Figure 5.1. The data indicates that *hassle-free* is achieved when one is not bothered with fulfilling various basic needs (*just enough* → *hassle-free* and *having quality home* → *hassle-free*), liabilities (*being free of debt* → *hassle-free*), debilitating conditions (*safe and healthy* → *hassle-free*), and unexpected increase of expenses (*for children* → *hassle-free*, *being prepared* → *hassle-free*, and *money management* → *hassle free*). It is interesting that the connotation of *hassle-free* as experiential or pleasure-related benefits of consumption is only indicated in one linkage, namely *comfortable life* → *hassle-free*. The utilitarian nuance of *hassle-free* is connected, as origin, with *happiness and family harmony*.

5.3.2. Structural properties of the generic goal system

An implication matrix can be used to analyze the structural properties of a goal system. Structural properties of goal systems are concerned with goal abstractness, prestige, centrality, instrumentality, equifinality, and multifinality. Below, each of these structural properties are examined.

Goal abstractness

Goal abstractness is calculated as the ratio of *in-degrees* to the sum of *in-degrees* plus *out-degrees* of a particular goal. This formula captures the extent to which a goal serves as a destination of other goals. The range of abstractness scores is from 0 to 1. An absolutely abstract goal, or abstractness score of 1, is achieved when a goal is the destination of all other goals, and the goal does not point to any other goal as the destination. The higher the abstractness score, the closer the goal to the notion of the terminal, end, or super-ordinate goal in a hierarchical structure.

Table 5.4. Abstractness (A), Prestige (P), Centrality (C), Instrumentality (I), Equifinality (E) and Multifinality (M) indexes of the generic allocation goals

No	Goal	A	P	C	I	E	F
1	To save	0.00	0.00	0.14	0.14	0.00	0.04
2	To repay debt	0.02	0.00	0.03	0.03	0.00	0.01
3	For necessities	0.06	0.00	0.05	0.04	0.01	0.03
4	For appliances	0.08	0.00	0.05	0.04	0.01	0.03
5	For secondary needs	0.08	0.00	0.02	0.02	0.01	0.01
6	For housing	0.09	0.01	0.05	0.05	0.01	0.02
7	To invest	0.16	0.01	0.03	0.03	0.01	0.02
8	For social expenditure	0.29	0.01	0.03	0.02	0.01	0.02
9	For children	0.30	0.03	0.10	0.07	0.02	0.03
10	Being prepared	0.53	0.09	0.16	0.08	0.02	0.05
11	Being free of debts	0.53	0.03	0.05	0.02	0.01	0.03
12	Having a quality home	0.54	0.06	0.10	0.05	0.01	0.04
13	Savings accumulation	0.54	0.02	0.03	0.02	0.02	0.03
14	Other goals	0.54	0.01	0.02	0.01	0.01	0.02
15	Fulfilling basic needs	0.55	0.04	0.08	0.04	0.03	0.05
16	Self-gratification	0.55	0.03	0.05	0.02	0.02	0.03
17	Social relationship	0.55	0.01	0.02	0.01	0.03	0.01
18	Being helpful	0.55	0.01	0.02	0.01	0.02	0.01
19	Money management	0.58	0.04	0.07	0.03	0.03	0.04
20	Medical care	0.58	0.01	0.02	0.01	0.01	0.01
21	Comfortable life	0.59	0.04	0.07	0.03	0.02	0.03
22	Children's competency	0.59	0.03	0.06	0.02	0.03	0.02
23	Extra income	0.60	0.03	0.05	0.02	0.02	0.03
24	Good up-bringing	0.60	0.03	0.05	0.02	0.02	0.02
25	Assured retirement	0.60	0.02	0.02	0.01	0.02	0.03
26	<i>Obedience</i>	0.65	0.02	0.03	0.01	0.04	0.02
27	<i>Safe and healthy</i>	0.71	0.05	0.07	0.02	0.04	0.03
28	<i>Prudence</i>	0.72	0.02	0.02	0.01	0.03	0.03
29	<i>Hassle-free</i>	0.74	0.08	0.11	0.03	0.06	0.03
30	<i>Just enough</i>	0.74	0.05	0.07	0.02	0.04	0.02
31	<i>Independent children</i>	0.74	0.04	0.05	0.01	0.02	0.02
32	<i>Spirituality</i>	0.78	0.02	0.02	0.00	0.03	0.01
33	<i>Family harmony</i>	0.78	0.01	0.02	0.00	0.03	0.01
34	<i>Happiness</i>	0.81	0.03	0.03	0.01	0.04	0.01
35	<i>Being productive</i>	0.81	0.02	0.03	0.01	0.03	0.01
36	<i>Social harmony</i>	0.83	0.02	0.02	0.00	0.03	0.01

Note:

In the abstractness index, subordinate goals are in normal font, intermediate goals are in bold, and super-ordinate goals are in italic. The five highest scores on the other indexes are in bold.

Eight goals are excluded from this table, namely *for insurance, increasing expenditure, improved life, gift to children, recognition, self-realization, financial independence, and social worthiness.*

Results of the calculation are summarized in Table 5.4. Eight goals have been excluded from this table, because of the lack of connectivity with other goals. The eight excluded goals are *for insurance*, *increasing expenditure*, *improved life*, *gifts to children*, *recognition*, *self-realization*, *financial independence*, and *social worthiness*. As apparent from the table, three clear clusters of goals can be identified. The first cluster consists of nine goals with abstractness scores equalling to or lower than 0.30 (average distance between goals is 0.03). This group is separated from the second group by an abstractness score of 0.23. The second group consists of sixteen goals, spanning from the abstractness score of 0.53 to 0.65. The average distance between goals is 0.007. Finally, eleven goals constitute the highest group on the abstractness scale, with a range of 0.65 to 0.83 (average distance of 0.01). This group is separated from the second group with a distance unit of 0.05. With regards to means-end chain theory (Gutman, 1982), these three groups can be called, respectively, action or sub-ordinate goals, focal or intermediate goals, and super-ordinate goals or values.

The sub-ordinate goals are mostly mentioned in the first laddering question. However, they are also mentioned in the second and higher laddering questions as much as 341 times (6% of total direct links). The dominant action goals are *to save*, followed by *for children* and *for necessities*. In terms of content, this indicates a good balance between saving and spending goals. Saving goals: *to save*, *to invest* and *to repay debt*. Spending goals: *for necessities*, *for appliances*, *for secondary needs*, *for housing*, *for social expenditure*, and *for children*.

The second group represents intermediate, focal, or master goals. The abstractness degrees span from 0.53 to 0.60. Sixteen goals constitute this category. The most important is *being prepared* with a total of 951 direct connections. It is followed by *having a quality home* and *fulfilling basic needs*. Intermediate goals represent life projects that people are committed to achieve (Emmons, 1989). They are focal goals in human life. The composition of intermediate goals, as revealed in the data, may indicate the level of wealth of the participants.

Finally, eleven goals constitute the highest goals in the hierarchy. The highest is *social harmony* (0.87). However, the most dominant super-ordinate goal is *hassle-free* (450 in-degrees, 160 out-degrees), followed by *just enough* (286 ins, 100 outs), and *safe and healthy* (284 ins, 117 outs). Other significant super-ordinate goals are *independent children* (232 ins, 81 outs), *happiness* (152 ins, 35 outs), *being productive* (134 ins, 32 outs). Again, the content of super-ordinate goals may indicate the level of economy of the participants. Super-ordinate goals that are common in developed economies, such as financial independence, self-realization and social recognition are not significant in the data.

Goal prestige

Goal prestige is computed as the ratio of in-degrees of a specific goal to the total number of connections shown in the map. It represents the extent to which a particular goal is served by, or ends with the pursuit of, other goals. The range of the goal prestige scores are from 0 to 1. A score of 0 implies that there is no other goal connected as an origin, which implies that the goal is purely a means for achieving other goals of the goal system. A perfect score of 1 indicates that all goals are connected with the goal as the origin, and no linkages between other goals. This means that the goal is the only end-state, or benefit, or expected consequence, of all the goal pursuits.

Column 3 of Table 5.4 exhibits the scores of the goal prestige. As it is apparent from the table, *being prepared* is the most prestigious goal of the generic allocation goal system. Uniquely, *being prepared* is the destination of only 3 goals, namely *to save*, *savings accumulation*, and *money management*. On the second place is *hassle-free*, followed by *having a quality home*. On fourth and fifth place are *safe and healthy* and *just enough*, respectively. At the bottom of the table, we can find five goals with the score of 0.0, namely *to save*, *for necessities*, *for appliances*, *to repay debt*, and *for secondary needs*. These five goals represent action goals of the generic goal system.

Goal centrality

A distinctive feature of the goal map is that the cluster of goals can be identified from the graphical representation. The cluster of goals can be identified in terms of the proximity in the goal map and in terms of orientation toward a central goal. For example, on the left side of the picture, two clusters appear on the top and lower plane. The former indicates cluster of social-related goals, whereas the latter indicates children-related goals. Other visible clusters are such as *being prepared*, and *hassle-free*. Analysis of centrality should reveal the clustering pattern of the goals. Centrality is measured as the ratio of in-degrees plus out-degrees of a particular goal over the sum of all cell-entries in the implication matrix. Centrality reflects how frequently a particular goal is involved in linkages with other goals.

Being prepared (506 in-degrees, 445 out-degrees) is the most central goal. This goal is the destination of three goals (*to save*, *savings accumulation*, and *money management*), and is the origin of eight other goals, namely *for children*, *for social expenditure*, *assured retirement*, *fulfilling basic needs*, *money management*, *medical care*, *hassle-free*, and *just enough*. Further, *to save* (0 ins, 813 outs) represents the second most central goal. Although there is no other goal with a destination in *to save*, this goal is an origin of seven goals, namely *for children*, *to save toward goals*, *assured retirement*, *being prepared*, *savings accumulation*, *money management*, and *home improve-*

ment. Next on the highest level of centrality is *hassle-free* (450 ins, 160 outs). There are eight goals that are connected directly with this goal, as a source goal, namely *for children*, *being prepared*, *money management*, *being free of debt*, *just enough*, *having a quality home*, *safe and healthy*, and *comfortable life*. In addition, four goals originate from *hassle-free*, namely *being productive*, *happiness*, *family harmony*, and *safe and healthy*.

Two other goals are close to *hassle-free* with regards to the centrality indices. The first one is *for children* (181 ins, 422 outs). On the fifth position is *having a quality home* (321 ins, 278 outs). Five other goals make up to the ten highest goals on the centrality indices, namely *comfortable life*, *money management*, *safe and healthy*, and *just enough*. In contrast, the lowest ten goals on the centrality scale are, in descending order, *social relationship* (69 ins, 57 outs), *social harmony* (95 ins, 20 outs), *recognition* (77 ins, 32 outs), *family harmony* (84 ins, 24 outs), *saving towards goals* (55 ins, 47 outs), *spending on secondary needs* (8 ins, 92 outs), *social worthiness* (54 ins, 8 outs), *gifts to children* (26 ins, 14 outs), and *for insurance* (0 ins, 12 outs). Some of these goals do not appear on the hierarchical map of the generic goal system, Figure 5.1.

Goal instrumentality

Instrumentality measures the importance for which a goal is an instrument for achieving other goals. It can be calculated by dividing out-degrees of a specific goal by the total links. Because out-degrees represent the frequency in which a goal is an origin of connections with other goals, the formula reflects the contribution of a specific goal in the achievement of other goals. A perfect 1 score will be obtained when there are only two goals in the goal system, and 0 when there is no out-degrees for the particular goals. The summary of the calculations for the instrumentality index can be found in Table 5.4.

The highest score on the instrumentality indices belongs to *to save*. It contributes to 14 % of the instruments for achieving goals. In the second position with an 8% contribution is *being prepared*. This is interesting, because *being prepared* is not an action goal. However, *being prepared* is connected with eight destination goals, with 445 linkages. The third highest instrumentality is expenses *for children*, with a 7% contribution. *For housing* is fourth place with a 5 % contribution. Sharing the fifth position, with a 4 % contributions for each, are *having a quality home*, *for appliances*, and *for necessities*. Therefore, *Fulfilling basic needs*, *to repay debt*, and *to invest* make up the 10 highest goals of the instrumentality index.

It is important to note that instrumentality is not necessarily associated with *action goals*, because three of the top ten are *focal goals*, namely *being prepared* (2nd), *having a quality home* (5th), and *fulfilling basic needs* (8th). In addition, at the 36th position (but the goal is excluded from the table), *for insurance* is among the

lowest levels on the instrumentality indices, although according to the *abstractness* indices it belongs to *focal goal*.

Equifinality

Equifinality refers to the functional relationship in which a goal can be achieved through two or more means. Index of equifinality of a goal can be calculated as the number of which goals are connected as an origin, divided by the total active cells of the implication matrix. Table 5.4 summarizes the equifinality of each goal. The table demonstrates high equifinality within the goal schema. The average equifinal frequency of the 44 goals, including the eight goals excluded from the table, is 16.18. Only three goals do not show equifinal pattern, with a 0 or 1 frequency, namely *to save*, *for insurance*, and *to repay debt*. In contrast, 17 goals demonstrate equifinal frequency of 20 or above. *Hassle-free* sat at the highest equifinality with a 41 frequency, followed by *happiness*, *obedience*, *safe and healthy*, and *just enough*.

Multifinality

Multifinality represents the opposite type of functional relationships between goals. That is, multifinality exists when one goal serves as a means for achieving several other goals. Table 5.4 also contains frequency of multifinality. It is simply counted as the number of goals that share the origin in a goal. The table shows a high multifinality, with the same average as equifinality, that is, 16.18. This similarity is not coincidental. The total frequency of equifinality should be equal to the total frequency of links in the implication matrix, and should be the same as the total frequency of multifinality.

Table 5.4 shows that every goal of the goal system is connected, as an origin, with more than one other goal. The lowest in terms of multifinality is *for insurance* (excluded from the table) and *for secondary needs* with a frequency of 4, followed by *social harmony* with a frequency of 7, and *social worthiness*, *family harmony*, and *spirituality*, each with a frequency of 8. There are 14 goals with a multifinality frequency of 20 or higher. The highest multifinality is *being prepared* with a frequency of 36, followed by *fulfilling basic needs* and *money management*, each with a frequency of 33 and 30, respectively. Further down on the frequency of multifinality are *having a quality home* and *to save*, with 29 numbers for each.

5.3.3. Nomological validity

The generic goals elicited by the generic goal-laddering procedure demonstrate a high level of organization. To establish nomological validity, it needs to be examined whether the goal construct is related to other aspects of consumer behaviour. Pieters, Baumgartner, and Allen (1995) proposed that the nomologi-

cal validity of goal structure is supported if information from the goal structure is associated with other variables. A relevant variable in consumer behaviour at the generic allocation level is consumer confidence with regards to the economic and financial situation.

To perform the analysis, consumer goal structure is deconstructed into two components, namely goals and linkages between goals, or simply links. Goals are the frequency of particular goals mentioned by each participant. There are 44 types of goals in the data. Further, links are the frequency of direct connections between two particular goals mentioned by a participant. The data contain 728 different types of links. However, most of these links are mentioned by only a small number of participants. To reduce idiosyncratic links, the same cut-off level as used in constructing the goal map is applied in this analysis. This cut-off level provided 71 different types of links.

Goals and links are regressed to consumer confidence. However, it is important to notice that goals and links are not independent to each other. To solve this problem, Pieters, Baumgartner, and Allen (1995) and Bagozzi, Bergami, and Leone (2003) applied non-orthogonal multiple regression methods, based on the suggestion of Appelbaum & Cramer (1974). We ran three analyses with three models. In Model 1, goals are entered into regression analysis using a stepwise method. In Model 2, links are entered into regression analysis using the same procedure. Model 3 is a hierarchical regression. Variables that are significant in Model 1 are entered first, and followed by significant variables of Model 2. Bagozzi, Bergami, and Leone (2003) provide justifications for this, that is, links represent more complex structural organization of goals. Therefore they should be tested after simpler structural effects pertaining to goals have been taken into account. Table 5.5 summarizes the analysis.

Table 5.5. Consumer confidence as a function of hierarchical goals

Model	<i>R</i> ²		<i>F</i>
1. Goals	.076**		9.508 (4, 410)
2. Links	.097**		8.202 (6, 398)
3. Sig. goals + sig. links	.121**		6.576 (10, 394)
<i>Hierarchical test</i>	ΔR^2	ΔF	<i>Significant variables</i>
A. Linkages (Model 2 over Model 1)	.058	4.448 (6, 394)**	for social expenditures (.132) for insurance(.106) being free of debt → hassle-free (-.165)
B. Goals (Model 1 over Model 2)	.033	3.792 (4, 394)**	to repay debt → hassle-free (-.105) money management → prudence (.100) comfortable life → hassle-free (.126)

Note. * *p* ≤ .05. ** *p* ≤ .01.

The table shows that goals explained 7.6% of the variance in consumer confidence, and link variables explained 9.7% of the variance in consumer confidence, about two percent higher than goals. There are four significant predictors from the goal variables, and six predictors from the link variables. Combinations of significant predictors of goal variables and link variables produced higher predictions on the variance in consumer confidence as compared to goals and links independently. The R^2 is also significant. In Model A, entering the significant link predictors to the model already containing two significant goal variables increases the prediction by almost 6%, over and above the existing model (Model 2 over Model 1). In reversing the order of the hierarchical model, i.e., Model B, produced lower changes on the variance in consumer confidence. Nevertheless, the effects are highly significant. In addition, there are four variables that are positively associated with the variation in consumer confidence, namely *for social expenditure*, *for insurance*, *money management* → *prudence*, and *comfortable life* → *hassle-free*. This indicates two types of relationships between generic goal systems and consumer confidence. First, consumer confidence is associated with the achievement of consumer goals, namely being able to afford *for social expenditure* and to achieve a state of *comfortable life* that makes it *hassle-free*. Second is that consumer confidence as a result of financial management of the respondents, as evident in *for insurance* and in *money management* → *prudence*. In addition, two variables are associated negatively with consumer confidence, namely *being free of debt* → *hassle-free* and *to repay debt* → *hassle-free*. Being currently in debt may be associated with a low-state of confidence to the household financial and macro-economic situations.

5.4. Discussion

The objective of this chapter is to characterize the construct of goals at the generic allocation level of consumer behaviour. Considering the strategic importance of consumer behaviour at this level, and the fundamental position of generic allocation decision making in economic theories, it is surprising that this area has been largely ignored in economic psychology and consumer behaviour research. This is particularly surprising to consider, as such extensive efforts have been spent on understanding consumers' goal systems at the more specific levels. Goal systems at the generic level may include various goal systems at the more specific levels. However, such studies cannot be brought directly to understanding consumer behaviour at the generic level, because they may lead us to believe that there are various goal systems at the self-regulatory mechanism of the consumer. A multiple goal system, each of which may consist of subordinate, intermediate, and super-ordinate levels of goals, would hinder rather than facilitate the functioning of the individual. Therefore, we propose that there are unified goal systems at the generic allocation level of consumer behaviour. Such goal systems,

which we call it as generic goal systems, may encompass all levels of the hierarchy of consumer goals, and overarching goal systems at the more specific level. In particular, we propose that generic goal systems are organized in a hierarchical structure as outlined in the goal system theory (Kruglanski et al., 2002).

Goals at the generic level of consumer behaviour are explored by applying a context-based goal elicitation procedure. The data demonstrated, as it is visualized in Figure 2.3, that generic goals are indeed highly organized in one hierarchical structure. Above the cut-off level that represents 60% of all associative networks, the 36 goals are interconnected through 65 types of direct connections. This supports our proposition that there is a unifying goal system at the generic allocation level of consumer behaviour. The hierarchical goal map indicates some possibilities of sub-systems within the overall generic goal system. Two clusters around goals of providing provisions for children and expenses for social relationships appear to be relatively independent. The former is connected with the main hierarchical structure with three direct connections, two of which are moving from the main structure to the children-related goal system. The socially-related goal systems are connected with the main structure only through one direct connection moving from the main structure to the sub-system structure. This may indicate a relatively independent cognitive-motivational schema for each of these domains. Further studies are required for establishing this conjecture.

The position of each generic goal in the hierarchical structure can be distinguished in terms of the degree of abstractness. Using an abstractness index, three groups of goals can be separated quite clearly. The lowest group of goals is separated from the intermediate group by 0.23 point on the abstractness scale, and the intermediate group is separated from the highest level group by 0.05. At the bottom layer of the structure are concrete sub-ordinate goals, namely spending, saving, repaying debts, and investing. Spending goals are specified into more concrete consumption intentions, namely spending on necessities, for housing, for appliances, for secondary needs, for social expenditures, and for children. The status of these goals are indicated from the low scores on the abstractness indices. Further, because these goals are elicited through a question specifically inquiring about action goals, i.e., what are you going to do with the money, the resulting responses can be categorized as action goals (Taylor, Bagozzi, Gaither, & Jamerson, 2006). In the taxonomic model of consumer goals (Huffman, Ratneshwar & Mick, 2000), these concrete goals may represent consumption intentions. In other words, consumption intentions at the generic allocation level consist of saving, spending, investing, and repaying debt.

Above the action goals are 16 goals with the abstractness indices ranges from 0.53 to 0.60, namely *being free of debt*, *having a quality home*, saving towards other

goals, *savings accumulation*, *being helpful* to others, *social relationship*, *self-gratification*, *fulfilling basic needs*, *medical care*, *money management*, *children's competency*, *comfortable life*, *good up-bringing* for children, *earning extra income*, and *saving towards assured retirement*. In terms of content, these goals indicate an interesting mixture of goals in consumer behaviour. Whilst they can be firmly categorized as intermediate or focal goals, in terms of functional interpretation they indicate different contents. For example, *fulfilling basic needs*, *being free of debts*, providing *good up-bringing* for children, and *earning extra income* might resemble more of a current concern as opposed to life projects as proposed by Huffman, Ratneshwar and Mick's (2000) model. The latter is apparently better represented in goals such as *saving towards assured retirement*, enjoying *comfortable life*, *being helpful*, and *saving towards other goals*. However, under certain circumstances, for example among the really low-income families, *fulfilling basic needs* might become a life project rather than a current concern (Alwit & Donley, 1996). The demographic background of the participants and the design of the elicitation procedure of this research limit the possibility to substantiate these interpretations.

Eleven goals earn highest scores on the abstractness indices, which range from 0.65 to 0.83. They are, in descending order, social harmony, happiness, being productive, spirituality, family harmony, independent children, hassle-free, just enough, prudence, safe and healthy, and obedience or fulfilling responsibility. At face value, this list confirms values as the super-ordinate goals of a goal hierarchy. There are some types of goals, however, that are not common in the western literature of consumer values. For example, just enough would hardly be considered as a value in a western cultural context. Moreover, the content analysis shows that this goal does not refer to an ascetic way of life that might be justified philosophically as a noble value (Bouckaert, 2003; Van Tongeren, 2003). Instead, it refers to a minimum standard of sufficiency that the participants aspire to achieve. In the context of an affluent society, this type of goal might not be relevant, or at least more appropriate as a current concern rather than a super-ordinate goal. The same pattern of differences appear to apply for independent children, being productive and hassle-free. This may justify the importance of studying generic goals of consumer behaviour across different levels of economies. In comparison, goals such as spirituality, social harmony, and obedience indicate the significance of cross-cultural studies.

Life projects and current concerns (Huffman, Ratneshwar & Mick, 2000) might be represented in the index of centrality. The top five goals on the centrality indices, in descending order, are *being prepared*, *to save*, *hassle-free*, *for children*, and *having a quality home*. This finding shows some differences as well as similarities with other research. For example, Canova, Rattazzi and Webley (2005) found that "self-gratification", "security", and "precaution" are the most central goals

on saving. The major difference is that *self-gratification* is relatively moderate on the centrality index, that is, 17th of 44 goals. Moreover, notice that the last three of these goals belong to the sub-ordinate level of the hierarchy of goals. This may indicate that concrete goals are more urgently needed to be satisfied before the more strategic but less immediate goals, such as self-gratification, saving for assured retirement, and saving towards other goals. In the case of *having a quality home* the reason is clear. Less than a year before the data collection was carried out, the region was struck by a huge earthquake, in which hundreds of thousands of houses are destroyed and almost six thousands people died. Quality homes such as houses with stronger structures may indeed emerge as urgent needs. Nevertheless, a pattern of generic goals appearing to be moderated by the economic level, emerge.

Being prepared is the highest goal in the prestige scale. But, *being prepared* is the destination of only three goals: *to save* (422), *savings accumulation* (32), and *money management* (26). These goals are similar in terms of financial management of the household. Thus, we may conclude that most financial behaviours are aimed at *precautionary goals*. The second highest goal in the prestige scale is *hassle-free*. The in-degrees of this goal are almost one half of *being prepared*. But, there are three times as many goals that end in *hassle-free* as compared to *being prepared*. These are: *being prepared* (48), *being free of debt* (39), *having a quality home* (38), *just enough* (35), *to repay debt* (29), *comfortable life* (27), *money management* (22), *safe and healthy* (19), and *for children* (17). Financial preparedness is, once again, a dominant goal in *hassle-free*. This is signified by the presence of *being free of debt* and *to repay debt* in the second and the fifth goals leading to *hassle-free*. The third highest goal in the prestige scale is *having a quality home* (in-degree 301). Only two goals lead to *having a quality home*. Both are action goals, namely *for housing* (225 direct links) and *for appliances* (76 direct links). Examination to the protocol: contemporary conditions in the aftermath of a major earthquake in the region around 6 months prior to the data collection. Subsequent goals: *just enough*, *safe and healthy*, *fulfilling basic needs*, *independent children*, *comfortable life*, *money management*, and *good up-bringing*.

In terms of instrumentality, the participants of this study considered saving as the most instrumental goal in order to achieve the overall goal system. Among others, the objective of saving is to be prepared in case of adverse contingencies. *Being prepared* itself is the second most instrumental goal of the generic goal system. *Being prepared* contributed up to 8% in terms of achieving all other goals, which is slightly more than a half of the contribution of saving. Somewhat surprising, the third most instrumental goal is expenditure on children's necessities. This is surprising because the ultimate goal of spending money on children's necessities is on achieving independency of the children. Strictly speaking, children's

independence should not contribute to the economic interest of the parents, unless they become dependent on the financial support of the children. Whereas this might be true in some cases, another possible interpretation is that children's financial independence will reduce the financial burden that the parents would otherwise be responsible for. This study has no background data to substantiate either of the conjectures, or some other possible explanations.

The equifinality and multifinality indexes support the notion of goal systemic theory. Goals in the generic goal system may become means for one or more of the higher level goals, signifying the multifinality principle. The other way around, a goal might be achieved through one or more lower level goals of the hierarchical structure of generic goal systems, thus signifying the principle of equifinality. All in all, the abstractness, prestige, centrality, instrumentality, equifinality, and multifinality indices indicate a strong case for the construct of generic goal systems.

To fully accept the validity of the construct, however, some analytical evidence is required. Following the example of Pieters, Baumgartner, and Allen (1995), and Bagozzi, Bergami, and Leone (2003), we proposed nomological validity as the parameter. In particular, we proposed that the construct validity of the generic goal system may be established to the extent that generic goal systems are capable of explaining significantly the variance in consumer confidence. As showed in Table 5.5., all the tested models explain the significant amount of variance in consumer confidence. Combined significant predictors produced higher prediction than when goal and link variables are taken independently. Moreover, the hierarchical model of multiple regression analysis showed that goal and link variables increased the prediction over and above each other. The effect of goal over link is smaller than the effect of link over goal. Nevertheless, these results provide evidence for the nomological construct validity of generic goal systems.

Some limitations and potential remedies regarding this study need to be mentioned. First of all, there are social, economic, and cultural backgrounds of the participants of this study that may not be representative of the universal population. Even limiting the target population to within the country of which the data was collected, the participants of this study belong to a specific stable income group with specific environments of organizational culture. This may or may not influence the manifestation and expression of the generic goal system. Thus, this study may be better conceived as a first effort in the direction of characterizing generic goal systems, rather than the definite generic goal system of the consumers. Another limitation is concerned with the scope of the hypothetical generic allocation context. This study adopted a hypothetical windfall in the size of regular income. Whereas this has proven to elicit sufficient variations in the generic

goal system, as predicted by the behavioural life-cycle theory (Shefrin & Thaler, 1988), the characteristic of the source of income has been kept neutral. Following the findings of Henderson and Peterson's (1992) studies, sources of windfall income may determine the salience of certain goals and its associative networks. In addition, the task presentation has been designed to reflect neutral regulatory focus. This may not represent the actual situation when consumers are confronting real generic allocation tasks. Nevertheless, doing so without proper controlling of the effects of regulatory focus (Higgins, 1996; Pham & Higgins, 2005; Crowe & Higgins, 1997) may even jeopardize the interpretability of the data.

5.5. Conclusion and implications


This study demonstrated, as expected, that consumers' goals at the generic allocation level of consumer behaviour are organized in a unified goal system. In terms of content of the goal system, generic goal systems consist of goals that are identified in research into goal systems at the more specific levels of consumer behaviour. However, this study has come up with a distinctive characteristic of generic goal systems. That is, competing goals at the more concrete levels are integrated at the intermediate and super-ordinate levels of the hierarchical structure of the generic goal system. This study also demonstrates that the validity of the construct of the generic goal system is supported in terms of nomological validity. The identified generic goal system has been able to significantly explain the variance in the related variable, namely consumer confidence.

Results of this study open some possibilities for further studies in the area. Attention from researchers of consumer behaviour and economic psychology to the generic allocation level of consumer behaviour has, at best, been scarce. The conception that studying consumer behaviour at the generic allocation level as being irrelevant, because of the assumption that decisions at the generic level might be a post fact of decision-making at the more specific level (Van Veldhoven & Groenland, 1993), may explain the lack of commitment. On the contrary, this study has demonstrated that a generic allocation level involves strategic goal systems from which the self-regulation of consumer behaviour at the more specific level might be conducted. Built on this, potential applications of the understanding of generic goal systems on consumer education, marketing, and consumerism policy are highly plausible. For this to be truly materialized, however, more studies on this subject are needed.



Chapter 6

Examining the independence and interdependence of saving and spending goals in a generic goal system



Summary. At the generic allocation level of consumer behaviour, saving and spending are not independent of each other. Saving is determined by disposable income, willingness to save, and willingness to spend. The same formula applies for spending. When the combination of the willingness to save and the willingness to spend exceeds the size of the disposable income, a conflict between saving and spending motives occur. This implies that the understanding of household savings cannot be achieved without a proper understanding of factors that determine household spending, and vice versa. In other words, understanding of individual and household saving will be enhanced by taking into account the factors of spending, and vice versa. To examine this proposition, two stages of analyses on the data were performed. In the first stage saving and spending goals were analysed separately within the framework of a generic allocation goal system. Saving goals and saving goal links, and spending goals and spending goal links were used to predict dependent variables in separate analyses. In the next stage, variables of spending goals and spending goals links were added to the hierarchical multiple regression model that already contained saving goals and saving goal links. In a separate analysis, variables of saving goals and saving goals links were added to the model that already contained spending goals and spending goal links. The results demonstrate that the goal and the link variables of the competing goals significantly increase the explanatory power of saving and spending goals on consumer involvement and consumer confidence.

6.1. Introduction

Saving and spending behaviours of individuals and households have been explained mainly from economic, behavioural, and psychological points of views. Economic theories emphasize the competing nature of saving and spending. Income can only be spent or saved, or some combinations of the two (Lea, Tarpy, & Webley, 1987). Economic theories accept that saving and spending behaviours are driven by some psychological motives. Economists and psychologists have proposed, assumed, or verified various saving and spending motives, e.g., Keynes (1936/1964), Duesenberry (1949), Modigliani & Brumberg (1954), Friedman (1957), Katona (1975), Nijkamp, Gianotten and Van Raaij (2002), Nyhus (2002), Khan, Dhar and Wertenbroch (2005), Hirschman and Holbrook (1982), Strahilevitz and Myers (1998), Kivetz and Simonson (2002). Section 2.4.2 provides a brief summary on saving and spending motives. What is striking from the literature is the vast number of the types of saving and spending motives a consumer is assumed to hold. Considering that consumers are assumed to deliberate over these motives at a generic level of decision making, as suggested in Austin and Vancouver (1996), spending and saving motives should be organized in certain structural fashions. Chapter 5 demonstrates that these competing motives are indeed highly organized a generic goal system. Therefore it is interesting to examine the functional relationships between saving and spending goals in a generic goal system.

Kruglanski et al. (2002) suggests that independence and dependence are measures of the functional relationships of goals in a goal system. Accordingly, we attempt to examine saving and spending goal systems separately, and examine whether one can explain significant portions of the other. In addition, we examine whether an addition of the competing goal system in an explanatory model containing elements of the other goal system, will significantly increase the explained variance of the criterion variable. We assume that any significant explanation of variances in the competing goal systems, and in the criterion variables as a consequence of the addition of the competing goal systems in the original explanatory model, would demonstrate the interdependence of saving and spending goal systems.

6.2. Overview of this study

The data analyzed in Chapter 5 will be used in this study. There are nine categories of action goals. Keynes (1936/1964) defines saving goals as including intention to save, to invest, to pay insurance, and to repay debt. Accordingly, four action goals will be considered as the elements of saving goals, namely *to save*, *for insurance*, *to invest*, and *to repay debt*. The remaining five types of action goals, namely

for housing, for appliances, for necessities, for children, for secondary needs, and for social expenditures, will be considered as the elements of spending goals. Separate implication matrixes will be constructed for saving and spending goal systems.

Based on the implication matrix, properties of hierarchical structure of saving and spending goals systems can be developed. Hierarchical goal maps will be constructed separately for saving and spending goals. Organizational features and structural properties of each goal system will be examined. In addition, two types of data, at the individual level, will be derived from each goal system, namely goals and goal-link variables. A goal-link variable represents the frequency of a direct linkage between two goals, as mentioned by the participants. The explanation of the competing variables will be examined using these derived variables. Considering that goals and goal-link variables are not independent of each other, a non-orthogonal multiple regression method (Appelbaum & Cramer, 1974) will be applied. In practice it concerns a hierarchical multiple regression analysis using the stepwise method.

Another objective of this chapter is to examine the interrelationship of saving and spending goals. If the two goal systems are interrelated in a generic allocation goal system, the explanatory power of saving goal systems (i.e., saving goals and the linkages between goals) on a related variable will be significantly increased by the inclusion of spending goal systems, and vice versa. Overall, the data consists of 728 types of goal-link variables. However, a large proportion of these variables consist of only very small number of cases with the value of 1 or higher. In this analysis, link variables will be limited only for the types of direct connection above the cut-off level, which will then be used for constructing the hierarchical map of the generic goal system as displayed in Figure 5.1.

6.3. Data and measures

Table 6.1 summarizes the data of saving and spending goals. There are 351 participants, or 83% of all participants, mentioning saving goals at the beginning of the goal chain. The total response consists of 1168 goal chains, which implies a response rate of 3.33 saving goal chains per participant. The total response consists of 4250 goals, which comprises of 077 direct links. However, there are twelve responses that consist of only one goal. Further, there are 348 participants mentioning spending goals. Overall, there are 3936 spending goals mentioned. The number of goal chains for spending is higher compared to saving goals, that is, 1214 goal chains for spending compared to 1168 goal chains for saving. However, the number of direct connections is significantly lesser, which is 2073 for spending goals, compared to 3077 for saving goals. This is further indicated by the difference of chain length. On average, a chain of saving goals

consists of 3.64 goals, whereas an average chain of spending goals consists of 3.24 goals.

Table 6.1. Summary of the saving and spending goals data

Data components	Frequency		Average/participant*		% of total goals	
	Saving	Spending	Saving	Spending	Saving	Spending
# of participants	351	348	-	-	-	-
Question I	1168	1214	3.33	3.49	27 %	31 %
Question II	1156	1174	3.29	3.37	27 %	30 %
Ladder I	1013	941	2.89	2.70	24 %	24 %
Ladder II	677	492	1.93	1.41	17 %	12 %
Ladder III	236	115	0.67	0.33	6 %	3 %
Total goal	4250	3936	12.11	11.31	100 %	100 %
Goal chain	1168	1214	3.33	3.49	100 %	100 %
Length of chain	3.64	3.24	-	-	-	-
Direct link	3077	2073	7.5	5.96	100 %	100 %

Data regarding direct links between saving goals and spending goals are summarized in the implication matrixes, Appendixes D and E, respectively. In addition, regression analysis will be performed to test the predictive power of saving and spending goals, and saving and spending links in several dependent variables. The dependent variables consist of consumer involvement in saving and spending, attitudes toward saving and debts, saving habit, and consumer confidence. Chapter 3 describes the information regarding these measures.

6.4. Results 1: Saving goals

6.4.1. Content and descriptive analyses

Content analysis: Of the 1168 saving goal chains, 822 begin with *to save*, 182 with *to repay debt*, 149 with *to invest* (149), and 15 with *for insurance*. It is apparent from this distribution that the intention to save is most dominant in the context of generic allocation of a moderate sized windfall income. On average, each participant mentioned 2.34 saving goals. In comparison, insurance appears to be unimportant for the participants. There are only 15 responses mentioning this goal, or equal to 0.04 per participant. Repaying debt and investing the windfall money are almost equally important to the participants. There is slightly more than one in every two participants mentioning debt repayment goals, whereas the proportion of participants mentioning investing goals is slightly under the balance.

The 1168 goals mentioned in the first question are connected with 3082 goals at the higher levels, i.e., intermediate and super-ordinate levels. Some important goals of the intermediate and super-ordinate levels are in descending order, *being prepared* for contingencies (496 responses), enjoying a relatively easy

life or *hassle-free* (251), *money management* (190), spending for education and other necessities for children (173), *being free of debt* (149), ability to fulfil all necessities or *just enough* (148), *earning extra income* (137), and *being safe and healthy* (105). The total 4250 goals provided 3077 goal links, that is, direct connections between two goals. The highest connections are from *to save* to *being prepared*, denoted as *to save* → *being prepared* (422 links), followed by *to repay debt* → *being free of debt* (135), and *to invest* → *extra income* (104). Several other links are significant, namely *to save* → *for children* (91), *to save* → *money management* (80), *being prepared* → *medical care* (65), *being prepared* → *for children* (54), *to save* → *savings accumulation* (48), *being prepared* → *hassle-free* (46), and *medical care* → *safe and healthy* (38).

Hierarchical goal map: The implication matrix (Appendix C) is used to construct a hierarchical representation of a goal map. The map contains only significant direct links. A cut-off level is determined using the same strategy as outlined in Chapter 4. Subsequently a representation level of approximately 62% of all goals is chosen. This representation level consists of 53 lines, and representing 10% of all links mentioned at least once. The result is a hierarchical map of saving goals, which is exhibited in Figure 6.1.

As is apparent from the figure, the representation level of the 62% of saving goals is highly organized. There is one structure encompassing 32 goals. The map is relatively more complicated than the overall goal map (Figure 5.1). Several new links that emerge in the saving goal map are *other goals* → *fulfilling obligations* or *obedience*, *assured retirement* → *financial independence* and *being prepared* → *financial independence*, *being prepared* → *prudence*, *fulfilling basic needs* → *just enough*, and *to invest* → *self-gratification*. This indicates a more detailed account to the goal systems.

Another feature concerns the goal chains. A goal chain captures schematic representations of goals by the individual. The most frequently mentioned schema consists of *to save* → *being prepared* → *medical care* → *safe and healthy* → *being productive*. The second most frequently mentioned is *to save* → *being prepared* → *for children* → *provision for good up-bringing for children* → *independent children*. The third is *to save* → *being prepared* → *for social expenditure* → *being helpful* → *social harmony*. Saving as a method of financial management apparent in the following chain: *to save* → *money management* → *hassle-free* → *safe and health* → *being productive*. Goal schema of debt repayment is represented in the following goal chain: *to repay debt* → *being free of debt* → *hassle-free* → *safe and health* → *being productive*. Another example, goal schema of investing motive is represented in the following goal chain: *to invest* → *extra income* → *just enough* → *hassle-free* → *safe and health* → *being productive*.

An interesting feature of these goal schemas is the ever presence of instrumental goals or values. Even the highest goal in the chain may be classified as an instrumental value, e.g., in the Rokeach (1973) definition of instrumental value.

For example, *being productive* might be classified as an instrumental value in the Rokeach's classification, but nevertheless it sits almost at the top of the hierarchical structure. It appears that spending and saving are driven by the motive to keep the participant being productive, probably in order to avoid negative income shocks due to inability to work.

Goal abstractness: Goals can be distinguished in terms of abstractness. The higher a goal in the hierarchical structure, the more abstract the goal. An abstract goal represents stable values over different time and situations. An abstract goal may be achieved through one or more concrete goals, signifying the principle of equifinality of the goal system theory (Kruglanski, 2002). Goal abstractness is computed as the proportion of in-degrees to the total of in- and out-degrees of a goal.

Table 6.2 contains the result of the computation. Three groups of goals can be distinguished in terms of the degree of abstractness. The first group consists of four of the lowest goals, namely *to save*, *for insurance*, *to repay debt*, and *to invest*. This group is separated from the second group, the intermediate level goals, by 0.36 points. The intermediate group consists of 23 goals, such as *being free of debt*, *being prepared*, *provision for children*, and *money management*. The abstractness scale of this group ranges from 0.50 to 0.63. The last group consists of 17 goals, such as *being safe and healthy*, *having hassle-free life*, and *family harmony*. These three groups may be designated as subordinate or concrete goals, intermediate or focal goals, and super-ordinate or values, respectively.

Goal prestige: Degree of prestige indicates whether a goal functions as a destination to other goals. It is computed as a ratio between in degrees and total direct connections. The scale ranges from 0 to 1. If all other goals end in a specific goal the prestige index of that goal is 1; and if no other goal ends in the goal then its prestige index is 0. The prestige index may be interpreted as indicating focal goals. It is concerned with the question of "What is it that I strive for?" According to Pieters, Baugartner, and Allen (1995), focal goals are the level at which a particular behaviour is normally identified by consumers.

Table 6.2 shows that *being prepared* is the most prestigious goal. The implication matrix (Appendix D) shows that *being prepared* is the destination of 14 goals, representing 16% of all direct connections in the saving goal system. However, there are only three goals above the cut-off level, namely *to save*, *savings accumulation*, and *money management*. The strength of connections between *to save* and *being prepared*, which exceeds other direct connection by a vast margins, is the reason why *being prepared* is at the top of the prestige index. This may indicate that, in one hand, saving is the most preferred mode of behaviour in order to achieve consumers' goals, and, on the other hand, *being prepared* is the most important objective of saving behaviours.

Table 6.2. Abstractness (A), Prestige (P), Centrality (C), and Instrumentality (I) indexes of saving goals

No	Goal	Ins	Outs	A	P	C	I
1	To save	0	813	0.00	0.00	0.26	0.26
2	For insurance	0	15	0.00	0.00	0.00	0.00
3	To repay debt	3	185	0.02	0.00	0.06	0.06
4	To invest	26	164	0.14	0.01	0.06	0.05
5	For secondary needs	6	6	0.50	0.00	0.00	0.00
6	For appliances	12	11	0.52	0.00	0.01	0.00
7	Being free of debt	149	135	0.52	0.05	0.09	0.04
8	For social expenditure	49	44	0.53	0.02	0.03	0.01
9	Savings accumulation	92	81	0.53	0.03	0.06	0.03
10	Being prepared	496	438	0.53	0.16	0.30	0.14
11	Other goals	52	45	0.54	0.02	0.03	0.01
12	Being helpful	29	25	0.54	0.01	0.02	0.01
13	For housing	29	24	0.55	0.01	0.02	0.01
14	For children	173	140	0.55	0.06	0.10	0.05
15	Money management	190	152	0.56	0.06	0.11	0.05
16	Medical care	77	60	0.56	0.03	0.04	0.02
17	Fulfilling basic needs	78	58	0.57	0.03	0.04	0.02
18	Social relationships	21	16	0.57	0.01	0.01	0.01
19	Having quality home	19	14	0.58	0.01	0.01	0.00
20	Children's competency	52	38	0.58	0.02	0.03	0.01
21	Self-gratification	37	27	0.58	0.01	0.02	0.01
22	Extra income	136	93	0.59	0.04	0.07	0.03
23	Assured retirement	81	54	0.60	0.03	0.04	0.02
24	For necessities	16	10	0.62	0.01	0.01	0.00
25	Increasing expenditure	38	23	0.62	0.01	0.02	0.01
26	Improved life	48	29	0.62	0.02	0.03	0.01
27	Good up-bringing	44	26	0.63	0.01	0.02	0.01
28	<i>Obedience</i>	57	28	<i>0.67</i>	0.02	0.03	0.01
29	<i>Recognition</i>	26	12	<i>0.68</i>	0.01	0.01	0.00
30	<i>Comfortable life</i>	31	14	<i>0.69</i>	0.01	0.01	0.00
31	<i>Gift to children</i>	10	4	<i>0.71</i>	0.00	0.00	0.00
32	<i>Self-realization</i>	47	19	<i>0.71</i>	0.02	0.02	0.01
33	<i>Prudence</i>	67	26	<i>0.72</i>	0.02	0.03	0.01
34	<i>Independent children</i>	90	32	<i>0.74</i>	0.03	0.04	0.01
35	<i>Hassle-free</i>	251	90	<i>0.74</i>	0.08	0.11	0.03
36	<i>Safe and healthy</i>	105	32	<i>0.77</i>	0.03	0.04	0.01
37	<i>Just enough</i>	148	43	<i>0.77</i>	0.05	0.06	0.01

38	<i>Financial independence</i>	63	19	<i>0.77</i>	0.02	0.03	0.01
39	<i>Family harmony</i>	21	5	<i>0.81</i>	0.01	0.01	0.00
40	<i>Happiness</i>	63	13	<i>0.83</i>	0.02	0.02	0.00
41	<i>Being productive</i>	45	7	<i>0.87</i>	0.01	0.02	0.00
42	<i>Social worthiness</i>	18	2	<i>0.90</i>	0.01	0.01	0.00
43	<i>Social harmony</i>	41	3	<i>0.93</i>	0.01	0.01	0.00
44	<i>Spirituality</i>	41	2	<i>0.95</i>	0.01	0.01	0.00

Note: In the abstractness index, subordinate goals are in normal font, intermediate goals are in bold, and super-ordinate goals are in italic. The five highest scores on other indexes are in bold.

The second highest on the prestige scale is *hassle-free*. This goal is the destination of around 8% of all goals in the consumer goal system. More specifically, it is the destination of 37 other goals. Five goals above the cut-off level include: *to repay debt*, *being prepared*, *being free of debt*, *money management*, and *just enough*. In other words, the primary objective of not having debt, of having money managed, of satisfying needs, and of having precautionary savings is to avoid being stressed in daily life.

The third highest goal on the prestige index, explaining approximately 6% of destination, is *money management*. This goal is the destination of 16 other goals, in which three of them are above the cut-off level. It is one of the primary reasons why people want to save, to have precautionary savings, and to repay their debt. *For children*, *being free of debt*, *just enough*, and *extra income* are other significant goals in terms of prestige scale.

Goal centrality: The centrality index is computed as the ratio of the sum of in-degrees plus out-degrees for a particular goal to the total number of cell-entries in the implication matrix. Therefore it may indicate the vitality of a goal in relations to other goals, of the goal system. From an information processing point of view, the centrality index may indicate the level of chronicity of a particular goal in the cognitive-motivational schema. The reason is that goal systems elicited through a laddering technique reveal the cognitive schema of motives in a goal setting (Bagozzi, Bergami, & Leone, 2003), and this schema becomes active or salient when individuals are exposed to stimuli which match or sufficiently overlap with existing categories in memory (Fiske & Pavelchak, 1986). Thus, the more often a goal is mentioned, both as the origin and as the destination of other goals, this indicates how chronic the goal in the cognitive-motivational schema of the individual.

Table 6.2 shows that the most central goal in the saving goal system is *being prepared* for adverse contingencies. The level of vitality of this goal in the saving goal system is indicated by the fact that *being prepared* is involved in 30% of all functional relationships within the saving goal system. The participants consider

being prepared as the most important goal in saving their income, and that having money saved will get them prepared for any eventualities related to health problems, children expenses, old age and assured retirement time, social life and basic necessities.

The next most central goal is *to save*. It contributes to 26% of all functional relationships of the saving goal system. Considering *to save* is among the lowest goal on the prestige index, this finding indicates how important it is for the participants to be able to save in their financial behaviour. Thus, as well as being a concrete goal, the ability to save and the practice of saving habits might be focal goals for the participants. This interpretation is supported by the centrality index, in the sense that good *money management* is the next central goal after *to save*. A good *money management* accounted for 11% of the schematic interconnections of the saving goal system. It is followed by *hassle free* at the slightly lower level of contribution to the saving goal system.

Goal instrumentality: Another important attribute of goals in a goal system is concerned with the level of instrumentality of a goal to the overall goals in the goal system. This attribute is measured in the instrumentality index. It is computed as the ratio of out-degrees for a particular goal to the total number of cell-entrees in the implication matrix. The instrumentality index is the opposite of the prestige index.

The most instrumental goal for the participant is *to save*. Saving contributes up to 26% of all means for achieving financial goals. This level of contribution is almost twice as much as the second most instrumental goal, namely *being prepared*. This may not be a surprise considering that *being prepared* is conceived as mostly achieved through saving. The more important notion is that *being prepared* in adverse contingencies is more instrumental to achieving financial goals as compared to *to repay debt* (6%), *to invest* (5%), *money management* (5%), and *for children* (5%). In exception for good *money management*, these are concrete goals. This finding indicates that *being prepared* and good *money management* are latent goals that are conceived as highly instrumental in achieving financial goals of the consumers.

6.4.2. The independence and interdependence of saving goals

The preceding section has outlined the saving goal system which consists of saving goals and links between saving goals. There might be differences between individuals in terms of the kinds of goals that they strive for and in terms of how they consider the achievement of one goal as related to another goal. In other words, there might be individual differences in the kinds of goals and the links

between goals. If this is the case, we may expect that saving goal systems explain a significant portion of the variation in psychological variables related to saving behaviour. Based on the available literature, saving behaviour can be explained from the following variables, namely consumer involvement in saving, attitudes toward debt and saving, the strength of saving motives, and saving habits. Further, the literature briefly reviewed in the introductory section of this chapter suggests the integration of saving and spending goals in the generic allocation goal system. Therefore, we hypothesize that the explanatory power of saving goal systems (i.e., goals and links between goals variables) will be significantly increased if spending goal systems are added to the equation.

To examine the hypotheses, hierarchical multiple regression analyses were performed. The analyses start with examining which of the independent variables, i.e., the saving goals, the links of saving goals, the spending goals, and the links of spending goals, significantly explain the dependent variables. Only the variables that significantly explain the dependent variables will be included in the hierarchical multiple regression analysis. The order of the hierarchical analyses is as follows. Significant saving goal variables were entered first, followed by the significant link between saving goals, spending goals, and finally the link between spending goals variables. We are interested on whether the inclusion of spending goal systems significantly increases the explanatory power of the saving goal systems.

It is important to notice that the analyses are carried out on two data sets. The variables of consumer involvement in saving are obtained from one data set (the total N for saving and spending goals systems is 175), whereas the attitudes toward saving and debt and the strength of saving motives are for the second data set (the total N is 248). Further, the consumer confidence and saving habit variables are obtained from both data sets.

Before carrying out the hierarchical multiple regression analyses, the intercorrelations between the dependent variables were examined. Due to the limitation as explained above, the intercorrelations analyses could only be done on each of the data sets. The analyses found that the intercorrelations between consumer confidence, saving habits, attitudes towards saving and debt, and the strength of saving motives are low (between 0.15 and 0.25), but statistically significant. Therefore each of these variables will be treated as a dependent variables in the latter stage of analysis. In comparison, intercorrelations between the components of consumer involvement in saving are high and statistically significant (i.e., between 0.45 and 0.69, with all $ps < 0.00$). Therefore the four components of consumer involvement in saving were collapsed into one variable, namely the consumer involvement in saving.

Consumer involvement in saving

Saving goals predict 38% of the variance in consumer involvement in saving, as apparent from Table 6.3. Links between saving goals predicted 25%, spending goals predicted 9%, and links between spending goals predicted 21%. Four significant goal variables predicted 18% whereas seven significant link variables explained 40% of the variance in consumer involvement in saving. These R^2 are all significant. The model including effects from four significant saving and spending goals predicted 18% of the total variance in consumer involvement in saving. The model including effects from seven saving and spending goal links accounted for 40% of the variance. As shown in the Hierarchical Test A, once the influence of saving goals is accounted for, four significant saving goal links increased the R^2 by 27% and is significant. However, the addition of two significant spending goals to the model already containing the effects of significant saving goals and saving goal links did not significantly increase R^2 .

Table 6.3. Consumer involvement in saving as a function of saving and spending goal systems

Model	R^2		F
1. Saving goals	0.38**		5.502 (2, 103)
2. Saving goal links	0.25**		9.258 (4, 96)
3. Spending goals	0.09**		5.731 (2, 94)
4. Spending goal links	0.21**		9.107 (3, 87)
5. Model 1 + 3	0.18**		5.571 (4, 79)
6. Model 2 + 4	0.40**		7.787 (7, 65)
<i>Hierarchical test</i>	ΔR^2	ΔF	Significant variables
A. Saving goal links (Model 2 over Model 1)	0.27	7.638 (4, 66) **	for children (0.31) to save → assured retirement (-0.53)
B. Spending goals (Model 3 over Models 1 + 2)	0.01	< 1 (2, 64)	fulfilling basic needs → comfortable life (-0.24)
C. Spending goals links (Model 4 over Models 1 + 2 + 3)	0.06	2.595 (3, 61)	

Note. Saving goals and saving goal links are in normal font; spending goals and spending goal links are in bold.

* $p \leq .05$. ** $p \leq .01$.

Finally, Model C shows that the addition of spending goal links to the model containing all other significant factors do not significantly increase the R^2 . Three variables are uniquely related to consumer involvement, each representing saving goals, saving goal links, and spending goal links. However, only *for children* has a positive coefficient, whereas *to save → assured retirement* of saving goal links and *fulfilling basic needs → comfortable life* of spending goal links have negative coefficients. This indicate that the participants may consider spending on children as a

form of saving for which their involvements are measured, whereas saving toward an *assured retirement* is altogether a different types of behaviour. It is important to notice that all participants are entitled a government arranged pensions program, which participation is compulsory and requires very little involvement from the participants. With regard to *fulfilling basic needs* → *comfortable life*, it appears that this goal link capture hedonic values of consumption, which is completely the opposite of saving sense.

Attitudes toward saving and debt

As apparent from Table 6.4, attitudes toward saving and debt is predicted by saving goals, saving goal links, spending goals, and spending goal links. Four significant saving and spending goals variable predicted 10% of the variance in attitudes toward saving and debt. Five significant link variables of saving and spending predicted 15%. The R^2 of these models are also significant. Links between saving goals increased the prediction of the variance in the attitudes by 0.06 point, over and above saving goals (Model A). Moreover, spending goals increased the prediction by 0.24 points, over and above saving goals and saving goal links. Spending goal links increased the prediction by 0.04 points over and above saving goals, saving goal links, and spending goals. Two variables of the saving goals and saving goal links, namely *to save* and *good up-bringing* → *independent children*, respectively, are positively associated with attitudes towards saving and debt. One spending goal links variable, i.e., *children's competency* → *independent children* is negatively associated with the attitudes.

Table 6.4. Attitudes toward saving and debt as a function of saving and spending goal systems

Model	R^2		F
1. Saving goals	0.08**		7.120 (3, 197)
2. Saving goal links	0.09**		7.196 (3, 187)
3. Spending goals	0.04**		9.045 (1, 209)
4. Spending goal links	0.04**		4.924 (2, 189)
5. Model 1 + 3	0.10**		5.740 (4, 166)
6. Model 2 + 4	0.15**		6.181 (5, 141)
Hierarchical test	ΔR^2	ΔF	Significant variables
A. Saving goals links (Model 2 over Model 1)	0.06	3.501 (3, 140)*	to save (0.19), good up-bringing → independent children (0.23),
B. Spending goals (Model 3 over Models 1 + 2)	0.02	4.093 (1, 139)*	children's competency → independent children (-0.18).
C. Spending goal links (Model 4 over Models 1 + 2 + 3)	0.04	3.661 (2, 137)*	

Note. Saving goals and saving goal links are in normal font; spending goals and spending goal links are in bold.

* $p \leq .05$. ** $p \leq .01$.

Saving habit

Saving goals, saving goal links, spending goals, and spending goal links each independently explain the variance in saving habit (see Table 6.5). Six significant saving goals and five spending goals predicted 14% of the variance in saving habits. Six significant saving and spending goal links predicted 10% of the variance. All of the R^2 s are significant. Model A of the hierarchical test shows that saving goal links did not add significant prediction in the variance of saving habits, over and above saving goals. However, the addition of spending goals in the equation add significantly in the prediction, over and above saving goals and saving goal links. Spending goal links also increases the prediction significantly, over and above saving goals, spending goals, and spending goal links. Four variables are associated uniquely with saving habit. *To save* and *children's competency* → *independent children* of the saving goal system are associated. In contrast, *self-gratification* is negatively associated with saving habits. *For social expenditures* → *spirituality* of the saving goal system is associated positively with saving habits.

Table 6.5. Saving habit as a function of saving and spending goal systems

Model	R^2		F
1. Saving goals	0.10**		7.298 (6, 324)
2. Saving goal links	0.07**		8.529 (3, 311)
3. Spending goals	0.06**		5.479 (5, 327)
4. Spending goal links	0.04**		4.909 (3, 297)
5. Model 1 + 3	0.14**		5.060 (11, 265)
6. Model 2 + 4	0.10**		5.571 (6, 230)
<i>Hierarchical test</i>	ΔR^2	ΔF	<i>Significant variables</i>
A. Saving goal links (Model 2 over Model 1)	0.03	2.533 (3, 227)	self-gratification (-0.16) to save (0.14)
B. Spending goals (Model 3 over Models 1 + 2)	0.06	3.100 (5, 222)**	children's competency → independent children (0.16)
C. Spending goal links (Model 4 over Models 1 + 2 + 3)	0.03	2.760 (3, 219)*	for social expenditures → spirituality (0.13)

Note. Saving goals and saving goal links are in normal font; spending goals and spending goal links are in bold.

* $p \leq .05$. ** $p \leq .01$.

6.4.3. Discussion

Saving concerns wealth accumulation, precautions against contingencies, assured retirement, investing, money management, saving toward goals including housing, for children, and other goals. Most of the traditional saving motives mentioned in Keynes (1936/1964) are confirmed. In addition, the hierarchical perspective of Lindqvist (1981) is also confirmed. Saving is considered as a way of money management.

In terms of structural properties, saving goals are highly organized. At the representation level of 62%, there is only one hierarchical structure encompassing all goals. The cognitive-motivational schema (Kruglanski, 2002 et al.; Bagozzi, Bergami, & Leone, 2003) of saving is well-organized. The position of various goals in the hierarchical structure can be identified according to the abstractness index. At the bottom of the hierarchy, reflecting a degree of low abstractness, are concrete goals, namely *to save*, *to repay debt*, and *to invest*. Goals at the intermediate level, such as *being prepared* and *assured retirement*, closely resemble saving motives in the saving literature and in the previous studies, as discussed above. The goals at the super-ordinate level resemble the findings of Canova, Rattazzi, and Webley's (2005) study, e.g., happiness, family harmony, and financial independence. Nevertheless, this study has found some distinctive characteristics of saving goal systems that may reflect differences in cultural and economic background with the previous studies. With regards to cultural aspects, this study has found the relative importance of motives in social relation and spirituality. With regards to economic background, the saving goal systems elicited in this study are relatively more concerned on the instrumental values and lesser on the terminal values of Rokeach's (1973) value system. This may indicate the fundamental problems of economic survival for the participants. Nevertheless, further studies are required in terms of establishing the cultural and economic factors of individuals' saving goal systems.

Although some research concluded that individuals do not associate debt and investing with saving (e.g., Wärneryd, 1999), this study shows that the goals of saving, debt repayment, and investing are integrated at the intermediate level of the hierarchical structure of the generic goal system. Thus, there might be some psychological foundation for the economic conception regarding saving, investing, and borrowing in a single construct (Keynes, 1936/1964).

With regards to structural properties, there is an issue concerning the economy-of-storage or the principle of non-redundancy of semantic memory (e.g., Chang, 1986). In short, this principle means that, if Goal A is linked to Goal B, and Goal B is linked to Goal C, then there should not be a direct link between Goal A and Goal C. Links of the saving goal system that violate the principle of non-redundancy are, for example: *to save* → *savings accumulation* → *being prepared*, *to save* → *being prepared* → *for children*, *to repay debt* → *being free of debt* → *hassle free*, *for children* → *good up-bringing (children's competence)* → *independent children*, *hassle-free* → *safe & healthy* → *being productive*. Notice that the A → C connections are omitted. Grunert and Grunert (1995) argue against the application of this principle in the laddering-technique of the means-end chain research of consumer behaviour. Their main proposition is that, at the aggregate level, redundancy in the cognitive-motivational schema is often inevitable, due to differences between indi-

viduals. In our case, another argument can be added. Saving involves strategic goals in consumer behaviour. That is, goals that serve multiple purposes as signified in the principle of multifinality (Kruglanski et al., 2002). The redundant schemas found in this study are concerned with strategic goals, such as *to save*, *being prepared*, *money management*, and *to repay debt*.

Finally, the hierarchical models of multiple regression analyses provided evidence for the interdependence of saving and spending motives, from the perspective of the former. Spending goals and links of spending goals increased the explanatory power of the saving goal system (i.e., goals and links) on saving involvement, attitudes toward saving and debt, strength of saving motives, and saving habits. This finding may provide impetus for developing frameworks and measurement of consumers' motives at the more specific level that integrates saving and spending motives.

6.5. Results 2: Spending goals

6.5.1. Content and descriptive analyses

Content analysis: In descending order, the 1214 spending goals are *for children* (290), *for housing* (268), *for necessities* (252), *for appliances* (236), *for secondary needs* (85), and *for social expenditures* (83). Overall, the spending goal system involves 41 goals. Three generic goals that are dropped from the list of spending goals are *to save*, *for insurance*, and *to repay debt*. The highest mentioned goals include *having quality home* (302 times, or 5% of all mentions), *for children* (298 or 4,9%), *for housing* (269 or 4,4%), *for necessities* (253 or 4,2%), *for appliances* (237 or 3,9%), and *for a comfortable life* (213 or 3,5%). In total, there are 2073 goal links. The highest mentioned link is *for housing* → *having quality home* (221), followed by *for necessities* → *fulfilling basic needs* (153), *for children* → *good up-bringing* (114), *for appliances* → *comfortable life* (96), *for children* → *children's competency* (82), *for secondary needs* → *self-gratification* (79), *having quality home* → *comfortable life* (75), and *for appliances* → *having quality home* (72). Direct links between spending goals are summarized in an implication matrix, given in Appendix D.

Hierarchical goal map: To keep the same level of representation as the saving goal system, a cut-off level of 11 is applied. This provides a 62% representation of all direct links and involves 44 types of links. Figure 6.2 shows the hierarchical structure of spending goals. It is apparent from the figure that spending goal systems are rather fragmented. In fact, there are three sub-structures. The main structure involves *for necessities*, *for housing*, *for appliances*, and *for secondary needs*. The super-ordinate motives appear to be centred on *hassle-free*, *just enough*, and *comfortable life*. The second structure is concerned with expenditures for children. This structure is connected with the main structure in the sense that

achievement of provision *for children* brings about *hassle-free*. An interesting feature is that *expenditure for children* provides a route to *financial independence*, through *independent children*. Finally, the third structure concerns social expenditure. The super-ordinate motives appear to be related to self-fulfillment (i.e., *being helpful* and *spirituality*), and social motive, namely *social harmony*.

Goal abstractness: The relative position of a goal in the hierarchical structure of a goal system is represented in the abstractness index. The index is measured as a proportion of in-degrees to the total direct connections to and from the goal. Table 6.6 contains the result of the calculations. First of all, it is important to notice some idiosyncratic goals, i.e., goals that are below the cut-off level on the implication matrix. There are several idiosyncratic goals, namely *medical care* (1 in, 0 out), *increasing expenditure* (5 ins, 4 outs), *being free of debt* (5 ins, 4 outs), *to invest* (8 ins, 6 outs), *being prepared* (10 ins, 7 outs), *other goals* (3 ins, 2 outs), *savings accumulation* (10 ins, 6 outs), and *assured retirement* (6 ins, 3 outs). Such idiosyncratic goals tend to have extreme values on the abstractness index.

The lowest goals on the abstractness index are *for housing*, *for necessities*, *for appliances*, *for secondary needs*, *for social expenditures*, and *for children*. These goals are elicited in the first laddering question: “What would you like to do with this money? It can be ascertained, therefore, that these goals represent concrete spending motives. In contrast, high abstractness index indicates super-ordinate goals or values. The highest goal is *social worthiness* (0.86), followed by *self-realization* (0.80), and *happiness* (0.80).

Goals with moderate abstractness level are often more important in the self-regulation of consumer behaviour. Moderate abstractness level indicates intermediate goals. Pieters, Baumgartner, and Allen (1995) stated that intermediate goals are the most salient of goals, and therefore represent focal goals or master goals (Taylor, et al., 2006). Several important intermediate goals include *having a quality home* (302 in-degrees, 264 out-degrees), *having a comfortable life* (213 ins, 157 outs), *fulfilling basic needs* (174 ins, 145 outs), *providing good up-bringing for children* (153 ins, 101 outs), and *children’s competency* (139 ins, 37 outs).

Goal prestige: Goals can be distinguished in terms of its prominence in the hierarchical structure. The first prominence indicator concerns goal prestige. It reflects the strength to which other goals are served to achieve a particular goal. Hence, it is measured as the ratio of in-degrees to total direct links in the implication matrix. Table 6.6 shows that *having a quality home* is the most prestigious goal, followed by *comfortable life* and *fulfilling basic needs*. Two other goals that are high on the prestige index are *for children* and *hassle-free*. As expected, *for housing*, *for necessities*, *for secondary needs*, *for social expenditures*, and *for appliances* are the lowest on the prestige index, thus signifying their position as concrete goals.

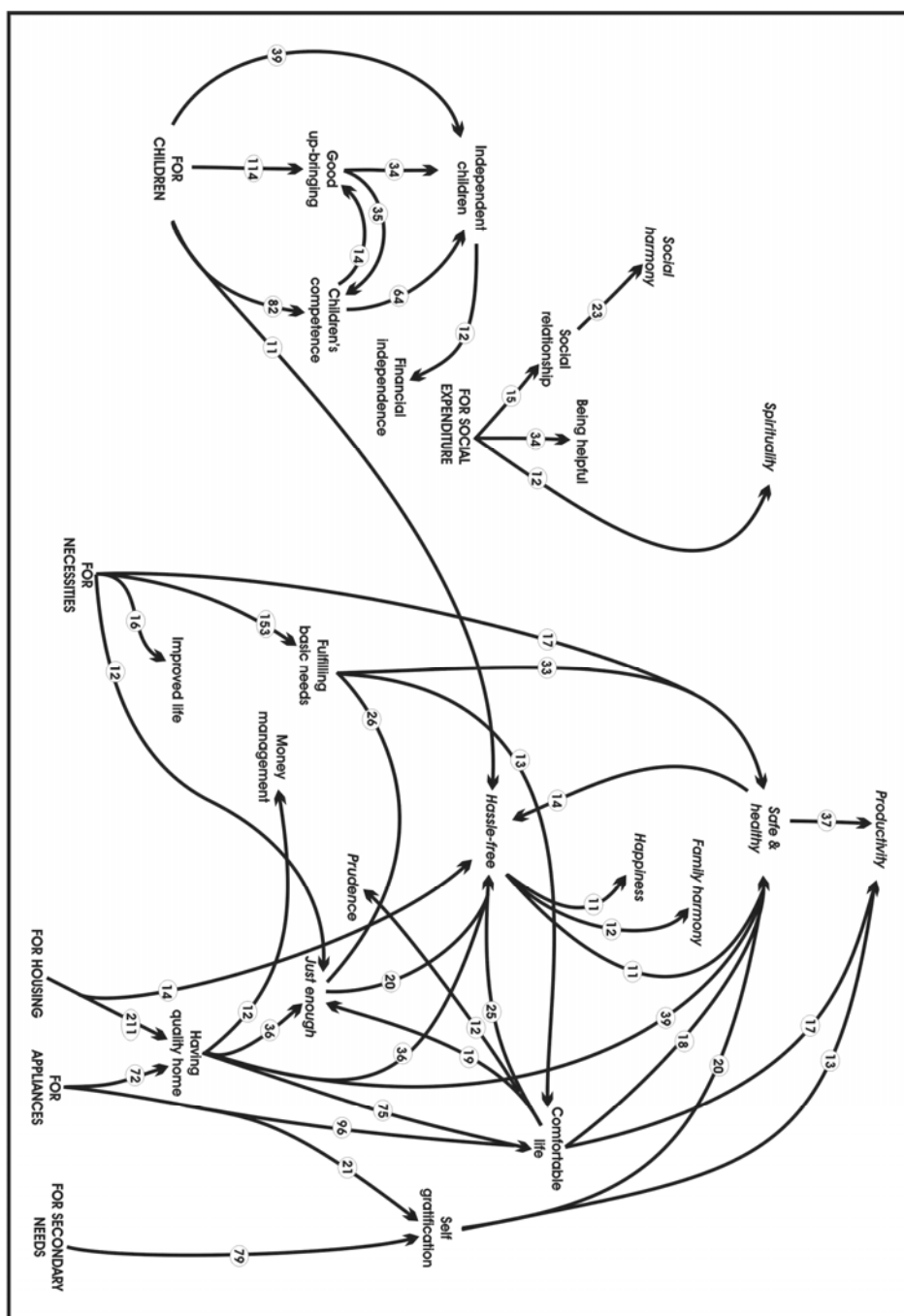


Table 6.6. Abstractness (A), Prestige (P), Centrality (C), and Instrumentality (I) indexes of spending goals

No	Goal	Ins	Outs	A	P	C	I
1	Social worthiness	36	6	0.86	0.01	0.02	0.00
2	Happiness	89	22	0.80	0.03	0.04	0.01
3	Self-realization	85	21	0.80	0.03	0.04	0.01
4	Productivity	89	25	0.78	0.03	0.04	0.01
5	Family harmony	63	19	0.77	0.02	0.03	0.01
6	Social harmony	54	17	0.76	0.02	0.03	0.01
7	Independent children	145	49	0.75	0.05	0.07	0.02
8	Spirituality	46	15	0.75	0.02	0.02	0.01
9	Hassle-free	198	70	0.74	0.07	0.10	0.03
10	Financial independence	35	12	0.74	0.01	0.02	0.00
11	Recognition	51	20	0.72	0.02	0.03	0.01
12	Prudence	35	14	0.71	0.01	0.02	0.01
13	Just enough	136	57	0.70	0.05	0.07	0.02
14	Safe and healthy	179	85	0.68	0.07	0.10	0.03
15	Money management	41	20	0.67	0.02	0.02	0.01
16	Obedience	68	38	0.64	0.03	0.04	0.01
17	Extra income	22	13	0.63	0.01	0.01	0.00
18	Gift to children	16	10	0.62	0.01	0.01	0.00
19	Good up-bringing	153	101	0.60	0.06	0.09	0.04
20	Improved life	51	34	0.60	0.02	0.03	0.01
21	Children's competency	139	97	0.59	0.05	0.09	0.04
22	Comfortable life	213	157	0.58	0.08	0.14	0.06
23	Being helpful	47	37	0.56	0.02	0.03	0.01
24	Fulfilling basic needs	174	145	0.55	0.06	0.12	0.05
25	Self-gratification	122	102	0.54	0.05	0.08	0.04
26	Social relationship	48	41	0.54	0.02	0.03	0.02
27	Having quality home	302	264	0.53	0.11	0.21	0.10
28	<i>For children</i>	8	282	0.03	0.00	0.11	0.10
29	<i>For social expenditures</i>	2	78	0.03	0.00	0.03	0.03
30	<i>For appliances</i>	4	233	0.02	0.00	0.09	0.09
31	<i>For secondary needs</i>	2	86	0.02	0.00	0.03	0.03
32	<i>For housing</i>	1	263	0.00	0.00	0.10	0.10
33	<i>For necessities</i>	1	238	0.00	0.00	0.09	0.09

Note: In the abstractness index, subordinate goals are in normal font, intermediate goals are in bold, and superordinate goals are in italic. The five highest scores on other indexes are in bold.

Another prominence indicator concerns the centrality of a goal in the goal system. A goal is central if it is connected to a relatively large number of other goals in the goal system, both in terms of being either origin or destination. As such, centrality index is computed as the ratio of in-degrees plus out-degrees to the total number of direct connections in the implication matrix. The result of the calculations regarding centrality index is presented in Table 6.6. As it is apparent from the table, the most central goal in spending the windfall income is *having a quality home*. It contributes to almost 21% of all direct connections in the goal system. The second most central goal is *comfortable life*, followed by *fulfilling basic needs*, *for children*, and *hassle-free*. Above the cut-off level, the least central goals include *gifts to children*, *extra income*, and *social worthiness*.

The relative positions of the goals in the hierarchical structure of a goal system may also be distinguished in terms of instrumentality. An instrumentality index is concerned with the contribution of particular goals in achieving other goals that are, but not necessarily, higher on the hierarchical structure. The instrumentality index is calculated as the ratio of out-degrees to the total number of direct links of the implication matrix. The result of the calculation to the data is presented in the last column of Table 6.6. The table shows that the most instrumental spending goal is *for children*. It accounted for the achievement of 10% of all goals in the goal system. On the second position is *having a quality home*, followed very closely by *for housing*. Two other highly instrumental goals are *for necessities* and *for appliances*.

Goal centrality: The index of goal centrality indicates the relative importance, in terms of accessibility, of goals at the generic level of consumer decision making. The five most central goals of spending consist of *having a quality home*, *comfortable life*, *fulfilling basic needs*, *for children*, and *hassle-free*. It is important to notice that, of the five most central goals, only *for children* represents action or sub-ordinate goals. The other action goals of spending sit in the following order: *for housing* (at the 6th of the centrality index), *for necessities* (9th), *for appliances* (10th), *for secondary needs* (20th), and *for social expenditures* (24th). The rest of the spending goals that make up to the 10 most central goals are *safe and healthy* (7th) and *good up-bringing* (8th). This finding indicates that focal goals are relatively more prominent at the generic level of consumer decision-making, relative to the sub-ordinate and super-ordinate goals.

Goal instrumentality: Index of goal instrumentality indicates the relative importance of a goal as a means in achieving the overall generic goal system. The five most instrumental spending goals include *for children* (the most instrumental goal), *having quality home* (2nd), *for housing* (3rd), *for necessities* (4th), and *for appliances* (5th). It is important to notice that in exception of *having a quality home*, the five

most instrumental goals concern action goals. The next five most instrumental spending goals consist of *comfortable life* (6th), *fulfilling basic needs* (7th), *self-gratification* (8th), *good up-bringing* (9th), and *children competency* (10th). All of these goals represent focal goals.

The index of instrumentality shows that apart from the action goals, housing and basic needs are the most important means for the participants. The next most important means concerns *self-gratification* and *comfortable life*, followed by education and development of the children. Thus the index of instrumentality suggests a mixture of utilitarian and experiential motives of spending as means for achieving generic goals.

6.5.2. The independence and interdependence of spending goals

The hierarchical structure of spending goals has been outlined in the preceding section. The remaining question concerns to whether the integration of saving goals will increase the explanatory power of spending goals on the variance of consumer involvement in saving. First of all, multiple regression analyses with stepwise procedures were performed separately to spending goals, spending goal links, saving goals, and saving goal links. Furthermore, the significant effects of goal variables and goal link variables were entered into the regression model separately, using the enter procedure. Finally, a hierarchical test was performed. Spending goals were entered in the first place, followed by spending goal links, saving goals, and finally, saving goal links. The result is exhibited in Table 6.7.

Table 6.7. Consumer involvement in spending as a function of spending and saving goal systems

Model	R ²		F
1. Spending goals	0.10**		6.689 (2, 96)
2. Spending goal links	-		-
3. Saving goals	0.06**		7.627 (1, 107)
4. Saving goal links	0.05*		6.377 (1, 102)
5. Model 1 + 3	0.19**		7.680 (3, 82)
6. Model 2 + 4	0.05*		6.377 (1, 102)
<i>Hierarchical test</i>	ΔR^2	ΔF	<i>Significant variables</i>
A. Saving goals (Model 3 over Models 1)	0.07	7.634 (1, 77)**	financial independence (-0.30) assured retirement (-0.23)
B. Saving goal links (Model 4 over Models 1 + 3)	0.00	< 1	

Note. Saving goals and saving goal links are in normal font; spending goals and spending goal links are in bold.

* $p \leq .05$. ** $p \leq .01$.

Spending goals explain 10% of the variance in consumers' involvement in spending. The R^2 is significant. However, spending goal links did not explain significant variance in the dependent variable. In contrast, both saving goals and saving goal links are related to consumer involvement in spending, albeit the effect is smaller compared to spending goals. Three significant spending goals and saving goals explained 19% of the variance in the dependent variable. Because there is no significant spending goal link, the hierarchical test is only performed on a shorter model. Saving goals increased the prediction on the variance in consumer involvement spending by 0.07 points, over and above the model containing saving goals. However, the addition of saving goal links did not significantly increase the prediction.

There are two variables uniquely associated with the consumers' involvement in spending, especially in light of the negative associations. Both variables belong to saving goals, namely *financial independence* and *assured retirement*. Considering that saving and spending motives are competing for the same budget (Lea, Tarpy & Webley, 1987), the negative association can be understood. Participants may be worried that spending would impact negatively on achieving *financial independence* and *assured retirement*.

6.5.3. Discussion

At the subordinate level: basic needs such as food, clothing, and housing, are represented in *for necessities*, *for housing*, and *for appliances*. At the higher level of the goal hierarchy, *for necessities* are linked with the improvement of living standards, the state of being satisfied for every basic necessity (i.e., *just enough*), and being safe and healthy. *Just enough* is also a destination of spending on housing and appliances. More specifically, spending on housing and appliances are directed in enjoying a comfortable life, which eventually brings about safety and health. All of these motives are meant to achieve a life that is just good (i.e., *hasle-free*).

There are also secondary needs in the spending goal system. This includes spending on hobbies, sports and recreations, and self development. It is connected solely with *self-gratification*. On the higher level, *self-gratification* is connected with being *safe and healthy*, and with *being productive*. Thus, secondary needs also serve for instrumental values in the goal system. Included in the secondary needs are spending on social motives, such as giving a treat for friends, donation, and other pro-social motives. Spending on social expenditures appears to serve social and transcendental values. The former is represented in *social harmony* and *being helpful*, whereas the latter is signified in *spirituality*. Considering the cultural dimension of the participant, i.e., collective culture and cyclical time values which

is related to spirituality (Hofstede, 2001), spending on *social expenditures* may also contain instrumental values.

Another specific content of the spending goal system is concerned with spending on children's needs. This includes spending on books and facilities for children. These might be considered as necessities or as an obligation for parents. Hence, the ability to spend for children is associated with *hassle-free*. Spending *for children* is justified in terms of children's competence. The ultimate goal for the children is their independence. However, it might be the interest of the parent for achieving *independent children*, because it is associated with *financial independence* of the parents. From the researcher's own observation, most university students are still fully financially dependent upon their parents. They rely on the financial support of their parents for probably all of their personal and study expenses. This is likely to cause extended financial burdens to the parents. Thus, having independent children might be considered as a step towards financial independence for the parents themselves.

The contents of the spending goal system may be characterized in terms of their dimensions. Following Khan, Dhar, and Wertenbroch (2005), both functional-versus-experiential and temporal dimensions of spending motives are represented. *For necessities* as contrasted to *for secondary needs* represents the former dimension. However, it is important to notice that our findings indicate that even experiential-driven spending is associated with instrumental values. With regards to the temporal dimension, spending on children's needs is justified in terms of future benefits, namely children's independence which brings about parents financial independence.

With regard to the structural properties, the spending goal system appears to be rather fragmented. Three clusters of goal systems may be identified in the hierarchical goal map (Figure 6.2). Two interpretations might be offered. First, it might be hypothesized that there are intrinsic competitions between spending goals. In particular, goals of opposite dimensions might be incompatible to each other. However, this hypothesis separates self-regulatory mechanisms for different types of spending motives. Alternatively, it might be hypothesized that the separate spending goal systems are integrated in a higher level of the goal system. In this case a generic goal system. This implies single self-regulatory mechanisms, such as the generic allocation goal system.

Considering the findings reported in Chapter 4, the second hypothesis appears to be more justifiable. As a conclusion, Chapter 4 reveals that the generic allocation goal system, in which the spending goal system is a part of, is highly organized. In addition, the hierarchical multiple regression analysis also supported the hypothesis. An implication of the integration between separate spending mo-

tives, and between spending motives and saving motives, in the generic allocation goal system is that the predictive power of the goal systems, i.e., spending or saving goal system, will be significantly increased by the inclusion of competing motives. This prediction is duly supported by the analysis. Saving goals increase the prediction in the variance of consumer involvement in spending, over and above spending goals. All in all, this study has found support for the independence and interdependence of spending goal systems.

6.6. Interdependency between saving and spending goals

Towards this end, the interdependence of saving and spending goals might even be pronounced when they are put together to predict a construct that is highly relevant to both, such as consumer confidence. Consumer confidence plays an important factor in the willingness of consumers to spend and to save their income (Katona, 1975). When consumers are confident with the financial situation of their household and to the future macro-economic situations, they are more willing to spend their income on durables. In contrast, when they are not confident, they are more willing to save. Therefore we expect that both, saving and spending goal systems, share some common variance within consumer confidence, and that the integration of the saving goal system will significantly increase the explained variance in consumer confidence above and over the spending goal system, and vice versa.

Table 6.8. Consumer confidence as a function of saving and spending goal systems

Model	R^2	F	
1. Saving goals	0.06**	8.365 (3,351	
2. Saving goal links	0.10**	8.356 (5,331)	
3. Spending goals	0.05**	6.817 (3,351)	
4. Spending goal links	0.05**	4.802 (4,318)	
5. Model 1 + 3	0.10**	6.464 (6,288)	
6. Model 2 + 4	0.16**	6.279 (9,244)	
<i>Hierarchical test</i>	ΔR^2	ΔF	<i>Significant variables</i>
A. Saving goal links (Model 2 over Model 1)	0.08	4.312 (5,245)**	being free of debt → hassle-free (-0.18) to repay debt → hassle-free (-0.14)
B. Spending goals (Model 3 over Models 1 + 2)	0.05	4.924 (3,242)**	hassle-free → safe and healthy (0.19) to save → being prepared (0.17)
C. Spending goal links (Model 4 over Models 1 + 2 + 3)	0.04	2.671 (4,238)**	for social expenditures (0.16) fulfilling basic needs → safe and healthy (-0.14)

Note. Saving goals and saving goal links are in normal font; spending goals and spending goal links are in bold.

* $p \leq .05$. ** $p \leq .01$.

Table 6.8 presents the result of the analysis. First of all, saving goals and saving goal links predicted more variance in consumer confidence than spending goals and spending goal links. Therefore, the saving goal system will have an earlier entry in the hierarchical model. Repeating the patterns as discussed above, Model 5 and Model 6 gave higher predictions in the variance of consumer confidence, at 10% and 16 % respectively, compared to the goals and links when taken separately. All of the models are significant, with $p \leq .01$. Particularly important is that the hierarchical test on the three models resulted in highly significant predictions. The addition of saving goal links in the equation increased the prediction by .08 points, and is significant, over and above the model containing saving goals. Furthermore, the addition of spending goals increased the prediction by .05 points, and is also significant, over and above the models containing saving goals, saving goal links, and spending goals. Finally, spending goal links increased the prediction by almost .04 points, which is significantly, above and over saving goals, saving goal links, and spending goals. This result provides robust support for the notion of the interdependence of saving and spending goals at the generic allocation level of consumer behaviour.

6.7. General discussion

We found that saving and spending goals, with each being isolated from the generic allocation goal system, may be considered as independent goal systems. Each goal system shows structural properties of a goal system (Austin & Vancouver, 1996). Goals in the saving and spending goal systems can be distinguished in terms of the level of abstractness. On the subordinate level of these systems are goals of concrete consumer acts, namely saving, repaying debt, investing, and purchasing insurance. The intermediate and super-ordinate levels of saving goal systems are similar to the superordinate goals identified in Canova, Rattazzi, and Webley's (2005) study with the sample of British consumers (2005). A significant difference may concern the instrumental versus terminal dimension of value systems (Rokeach, 1973). Whereas the British study demonstrates the importance of terminal values in the top of the hierarchical structure of saving motives, e.g., self-gratification and self-esteem, our study revealed the larger importance of instrumental values, even at the top of the structure. On top of the prestige index are goals such as being prepared against adverse contingencies, money management, and a hassle-free life. Differences in the economic background of the samples may explain the subtle differences in the saving goal systems. To the best of our knowledge, however, the notion of economic factors in consumers' goal system of saving has not been studied. This study may provide an impetus for further studies in this area.

The spending goal system identified in this study is less organized as compared to the saving goal system. Three subsystems are apparent from the hierarchical map of spending goals. The first subsystem is concerned with the dimension of tradeoff between functional goals (Khan, Dhar, & Wertenbroch, 2005). The second subsystem may indicate the temporal dimension of spending motives. It is interesting that spending on children's necessities is considered by the participants as a strategy or instrument for achieving financial independence for the parents. Finally, the third subsystem is concerned with social functions. In addition, the spending goal system also showed strong inclination toward instrumental values at the super-ordinate level of the hierarchy. On top of the prestige index are goals such as having a hassle-free life, being safe and healthy, having the ability to provide good up-bringing for children, a comfortable life, and having a quality home. Similar to the saving goal system, this finding may indicate the significance of the economic background in consumers' goal systems. This may provide suggestions for further studies, along with studies on the subsystems of spending motives at the generic allocation level.

The independence of saving and spending goal systems are also demonstrated in multiple regression analyses. Saving and spending goals, and links of saving and spending goals predicted significant variance in the related variables. For example, saving goals predicted 38% of the variance in consumer involvement in saving, whereas links of saving goals predicted 25% of the variance. Moreover, the hierarchical model showed that links between saving goals increased the prediction by 0.27 points, over and above saving goals. The predictive power of saving goal systems on saving motives, attitudes, and habit is less robust than on consumer involvement in saving, but remains significant. In contrast, links between spending goals did not predict consumer involvement in spending. The lack of predictive power of the linking variable might be explained by the fragmentation in the spending goal system. Thus, this finding may provide strong arguments for studies into the subsystems of spending goals at the generic allocation level of consumer behaviour.

Interestingly, saving goals and saving goal links predicted significant portions of the variance in consumer involvement in spending. The same results are obtained from the multiple regression analysis to variables related to saving goals. Spending goals and spending goal links significantly predicted variances in consumer involvement in saving (9% and 21%, respectively), attitudes toward saving and debt (4% each), and saving habits (6% and 4%). The predictive power of the competing goals is lower than the main goal, thus justifying the independence of each of the goal systems. However, the predictive power of most of the combined significant variables of saving and spending goals (Model 5), and of saving and spending goal links (Model 6), are higher than the independent sys-

tems. For example, Model 5 and Model 6 in Table 6.4. predicted 10% and 15% of the variance in consumer involvement in saving, respectively, as compared to a respective 8% and 9% prediction of saving goals and saving goals links, and 4% for each component of the spending goal system.

Model 5 and Model 6 of the multiple regression analyses presented in Table 6.3 through 5.5. and in Table 6.7. provide a strong argument for the interdependence of saving and spending goals at the generic allocation level of consumer behaviour. The strength of the interdependence is tested on the predictive power of saving and spending motives on the uniquely associated variables, such as consumer involvement in saving, consumer involvement in spending, and saving habits. The hierarchical models of the multiple regression analyses indicate that spending goals increased the prediction in the related variable over and above saving goal systems (Model B) in Table 6.3 through 5.5. For example, spending goals in Table 6.5 increase prediction in the variance of saving habits by .06 point, over and above saving goals and saving goal links (Model A). The same results are obtained with Model C, which tested the changes in the prediction of the dependent variables over and above Model B.

6.8. Conclusion and implications

At the generic allocation level of consumer behaviour, saving and spending behaviours are not independent of each other. Saving is determined by disposable income, willingness to save, and willingness to spend. The same formula applies for spending. When the combination of the willingness to save and the willingness to spend exceeds the size of the disposable income, a conflict between saving and spending motives occur. Thus, saving and spending behaviours are determined by income, saving goals, spending goals, and the nature of relationship between saving and spending motives in the consumers' goal system. Putting all of these factors in a unified framework is essential in understanding consumer behaviours at the generic allocation level.

The theoretical perspectives in this area, namely economics, behavioural, and psychological approaches differently view saving and spending behaviour at the generic allocation level. Whilst emphasizing the nature of conflicts between saving and spending, economic theories consider the psychological factors irrelevant. The assumption of the rational economic agent implies that all matters relate with obtaining the maximum utility of income from various ways of allocation and for intertemporal utility functions. Consumer behaviour is determined by income; factors of willingness are deemed irrelevant. Although strongly rejecting the assumption of perfect rationality and along the way proposing sound models of consumer behaviour based on cognitive-affective factors, the behavioural

approach ends up in the dominance of income factors. Saving and spending are determined by mental accounting processes of income and circumstances, rather than by goal systemic processes.

Towards this end, this chapter has proposed an analysis of the constructs of saving and spending goals. The objective is to characterize the hierarchical structures of saving and spending goals independently, and to analyse the interdependence of saving and spending goal systems. Goals and goal systems are elicited using the generic goal elicitation procedure. Descriptive analyses are performed to address the first objective, whereas multiple regression analyses addressed both objectives.

Overall, the results confirmed the independence and interdependence of saving and spending goal systems. Saving motives are highly organized in terms of hierarchical structure. Although spending motives are less organized as compared to the saving goal system, the dominant structure and two sub-structures are identified. In addition, tests on the explanatory power of goal systems on the related variables, such as consumer involvement in saving and spending, obtained positive results. All tested models predicted the variables significantly. With regards to the interdependence of saving and spending goal systems, significantly combined saving and spending goals significantly predicted the variance in the related variables. Moreover, the hierarchical multiple regression models show that the inclusion of competing goals increase the prediction on the variance in the related variable, over and above the focus goal.

The results of this study offer some significant implications. With regard to saving and spending goal systems as separate entities, this study confirmed previous studies, particularly the study of Canova, Rattazzi, and Webley (2005). Saving and spending goals are organized in a hierarchical structure. The hierarchical perspective adopted in this study provides a framework for understanding the functional relationship between goals at different hierarchical levels. Some indications regarding the economic and cultural factors in the saving and spending goal system might be worth further investigation. In addition, this study identifies potential divisions of spending goals into sub-goals with independent structural properties. With regards to the interdependence of saving and spending goal systems, this study offers a wide range of implications. With regards to research, further examinations on the precise nature of functional relationship between saving and spending goal systems within the self-regulatory mechanism of consumers are needed. Another implication concerns the measurement of saving and spending motives. To the best of our knowledge, almost every panel study on the household economic behaviour includes some instruments measuring saving and spending motives. However, the instruments are based on the con-

ception of saving and spending motives as independent variables. The findings of this study suggest the importance of incorporating the generic-based goal elicitation procedure in these panel survey studies. In addition, this study suggests the incorporation of saving and spending motives in consumer education, advertising, and probably in the policies purported to address household welfare issues.

Finally, some limitations of this study need to be considered. The results of this study cannot be generalized into wider contexts because the sample is not representative of the general population. Specificity to cultural and economic background of the population is an obvious limitation regarding the generalization of the results of this study. In addition, variations between socio-economic backgrounds of the segments within the population may further limit the generalization. Nevertheless, addressing these issues may contribute to the advancement of our understanding in consumer behaviour at the generic allocation level.



Chapter 7

Gender and generic goal systems



Summary: Gender differences in terms of economic behaviour are interesting as well as important issues. Observations in many walks of life indicate significant and probably systematic differences between men and women. Experimental economics have extensively studied the issue, with mixed results. The perspective of these studies asserts gender differences as dependent variables. However, the intervening variables contributing to the differences have not been examined empirically. This study represents an attempt to fill in this particular void. Based on the concept of sex and gender roles, we hypothesize that men and women are different in terms of generic goal systems, which we assume to mediate differences in the observed economic behaviour. Analysis of the contents, organization and structural properties of the generic goal systems, and on the psychological, behavioural and demographic factors reveal some support for the hypothesis. Utilitarian values and precautionary motives are more prevalent in the generic goal systems of men, whereas non-utilitarian goals that resemble hedonic motives are more prevalent in the generic goal systems of women. In conjunction with the observed differences in demographic backgrounds, these findings should be interpreted carefully.

7.1. Introduction and motivation

Explaining gender differences in terms of economic behaviour is of great interest as well as great potential importance. It is an interesting study as there is hardly any discipline of social sciences that has excluded gender or gendered issues within the scope of the discussion. With regards to economic behaviour, two gender-focused perspectives emerged, namely the economics of gender (Jacobsen, 1998) and the feminist economics (e.g., Ferber & Nelson, 1993, 2003; Hewitson, 1999). The economics of gender seeks to integrate gender as a factor in the theoretical and policy models; whereas the feminist economics suggests that the traditional economics is biased toward the model of “man”. Feminist eco-

nomics seeks to build more objective or unbiased economic theories (Ferber & Nelson, 1993; Blais & Weber, 2001). Apart from these two approaches, differences in economic behaviour have been examined quite extensively in experimental economics, as the brief review below describes. Built on this, the present study aims to contribute in terms of explaining differences between women and men in terms of similarities and differences in generic goal systems.

Gender differences in economic behaviour are important in several respects. In the theoretical domain, economic theory assumes that economic agents are homogenous, or at least the adherence to rational principles implying for both men and women, always come to the same preference, all else being equal. However, much research shows limitations in human rationality (e.g., Maurice, 1952; Ellsberg, 1961; Tversky & Kahneman, 1974; Kahneman & Tversky, 1979). As claimed in the feminist literature, gender differences might not be ignored in the modelling of economic behaviour (Ferber & Nelson, 1993), in favour of the homogeneity assumption. Consequently, if differences between the genders in behaviours where money is at stake are confirmed, theories that model agents as homogenous, or at least drawn from a common distribution, may predict behaviour inaccurately (Eckel & Grossman, 1998).

Gender differences are also important issues in public policy. For example, there are many welfare programs specifically addressing women needs (e.g., Lewis, 1993). The encouragement of women to entrepreneurship is considered to have important implications in the growth of the national economy (Scherer, Brodzinski & Wiebe, 1990). Gender differences also have significant implications in the practical domain, such as marketing and marketing communication (Evans, Moutinho & van Raaij, 1996; Schiffman, Kanuk & Hansen, 2008; De Pelsmacker, Geuens & Van den Berg, 2007; Kotler, Armstrong, Wong & Saunders, 2008).

Outside the feminist research, studies into gender differences in economic behaviour is mainly conducted in economics and psychology. Among the covered topics are aspects of economic behaviour such as decision-making (e.g., Eckel & Grossman, 1996; Andreoni & Verterlund, 2001; Bolton & Katok, 1995; Brown-Kruse & Hummels, 1993; Croson & Buchan, 1999; Eckel & Grossman, 1996, 1998; Gneezy, Niederle, & Rustichini, 2003), perception, such as perception of risk (e.g., Blais & Weber, 2001), risk attitude (e.g., Eckel & Grossman, 2008; Levin, Snyder & Chapman, 1988; Schubert, Gysler, Brown & Brachinger (1999), entrepreneurial behaviour (Kolvereid, 1996; Gatewood, Shaver & Gartner, 1995), and financial behaviour (Bajtselmit & Bernasek, 1996).

Experimental and survey methods are applied equally in psychological studies, but economic studies mostly apply experimental methods. The following illustration is taken from Croson and Buchan (1999), to illustrate how an experi-

ment is conducted to examine gender differences in economic behaviour. Croson and Buchan examined gender differences in bargaining using the trust game. In the experiment, one subject acts as the proposer. He/ she is given a choice of sending some, all, or none of his/her \$10 experimental payment to an anonymous partner, the “responder.” The condition is that the experimenter triples any money sent. However, the proposer faces problems of trust. He/she may gain money more than the experimental payment if the responder returns more than what he or she received. However, the proposer may lose all or some of the experimental payment if the responder decides to keep them all or to return less of what was sent, respectively. Since the responder may keep any money received (the \$10 payment plus the tripled money), he/she is playing a dictator’s game. A rational solution for this game, according to the principle of subgame-perfect Nash equilibrium, is for the proposer to send no money and for the responder to return none.

Data of the study demonstrated that nearly all of the participants sent some money to their partner, with an average of \$5.16. With regards to gender, there are no significant differences between men and women in the amounts sent by the proposer, and regression analysis confirms that there is no significant effect of gender. However, women participants returned 9.8% higher than men, that is, 37.4% compared to 28.6%, respectively. Regression analysis on the behaviour of responders showed a significant effect of gender, even when controlling for the amount the responder received. Upon this finding, Croson and Buchan (1999) explained that either women are more altruistic than men or the results have something to do with risk attitude, particularly in the case of the proposer. Although no clear-cut conclusion was offered, the data reported was similar to the findings of Eckel and Grossman (1998).

The experimental method provides a candid observation in economic behaviour and testing the predictions of economic theories (e.g., Smith, 1994; Bergstrom, 2003; Starmer, 1999). Extensive experiments covering many areas of economic behaviour have been conducted. For example, see Plott and Smith (2008) for a comprehensive volume on experimental economics. Nevertheless, in the context of gender differences, the accumulation of findings has so far not provided a coherent conclusion about differences between men and women in economic behaviours. Results from experiments in cooperative games illustrate this point. Whereas Rapoport and Chammah (1965) reported that women are less cooperative than men, Nowell and Tinkler (1994) found that women are more cooperative than men. Furthermore, Mason, Phillips and Redington (1991) and Stockard, Van de Kragt and Dodge (1988) found that there is no difference between women and men in non-cooperative games. The common explanation to

the inconsistency concerning experimental methods, such as differences in sample sizes, designs of choice set, anonymity, result interpretations, periods of observation, and contexts of the experimental problems (e.g., Eckel & Grossman, 1996, 1998; Nowell & Tinkler, 1994; Mason, Phillips & Redington, 1991). However, this argument implies serious questions regarding the robustness of the finding. If every single aspect of the method mentioned above, influences different behaviours, any difference and similarity would only be applicable in a very finely defined situation and consequently not much generalization can be made.

In addition, the studies share some similar characteristics. That is, they are focused on examining differences in terms of overt economic behaviours. Mental processes that lead to behaviour are assumed to be irrelevant. To the best of our knowledge, the intervening variables of differences between men and women in economic behaviours have not been examined. For this reason, this chapter focuses on analyzing gender in relation to generic goal systems. We assume that consumer goals and goal systems intervene between the pre-dispositional aspects of gender (i.e., biological, socio-cultural, and psychological) and the resulting economic behaviours. Moreover, we assume that economic behaviour is goal driven (Van Osselaer et al., 2005; Pieters, Baumgartner & Allen, 1995). Built on the results reported in Chapters 4 and 5, in which goals at the generic level of consumer decision making are highly organized, we hypothesize that there are differences between men and women in terms of generic goal systems. Further, differences between the generic goal systems of men and women can be explained in terms of sex and gender roles, as discussed in the following section.

7.2. Sex role, gender role and the generic goal system

How does gender influence the formation of generic goal systems? According to Austin and Vancouver (1996), goals can be forced or sold to people, such as by virtue of social position, responsibility in the family, or responsibility that arises from transitions in life. Further, the goal setting framework of consumer behaviour (Bagozzi & Dholakia, 1999) explains that goals may arise from several sources. Goals may also arise from biological, moral, or ethical forces, and such goals appear to arise automatically. In addition, goals may arise from a reasoned reaction to external stimuli, such as reactions to the news on the financial crisis. Goals also can arise from a reasoned reaction to an internal stimulus, such as when someone engages in a particular problem and comes to a solution that requires certain action goals. More on the goal setting framework can be seen in Section 2.2 of this dissertation. Built on this, we assume that two factors of goal formation are relevant to the gender issue, namely the externally forced and the internally driven goals (i.e., biological, moral, and ethical goals).

Most of goals arising from external and internal forces are related to social role or responsibilities. In relation to gender differences, this explains the distinction between sex roles and gender roles. A gender role captures the socially accepted behaviours, attitudes, and interests of each of the sexes. Thus gender roles are socially constructed (Burn, 1996; Helgeson, 2005; Epstein, 1999). In contrast, sex is biological in the sense that women have two X chromosomes and men have one X and one Y chromosome. Differences in the genetic predispositions of male and female bodies develop specialized organs, such as wombs, testes and breasts, as well as certain physiological differences relating to the balance of hormones circulating in the blood and the menstrual periods for women (Connel, 2002).

Over the course of evolution, human societies conceived different roles for women and men, which are encapsulated in the concept of gender roles (Rabinowitz & Valian, 2000). Some socially-defined roles follow from the biological predisposition; other gender roles are completely socially constructed (Connel, 2002). Gender roles are internalized to members of a society through socialization processes. In a traditional society it is delivered through direct interaction between members of the society; in modern society, mass media such as television, radio, printed and interactive media act as important agents of socialization. Further on this, sociological and anthropological studies revealed changes in gender roles, which might be distinguished in terms of traditional and modern conceptions of gender roles (e.g., Connel, 2002; Helgeson, 2005; Stockard, 1999).

According to Evetts (1996), most traditional conceptions impose different expectations for boys and girls. A traditional conception generally implies that, for boys, there is an assumption that work, will constitute a fundamental part of their adult identities. Marriage and fatherhood are in no ways to contradict these works and career expectations. Rothbard and Edwards (2003) found evidence that, particularly for men, increasing time towards the family, does not affect their time allocated for career and work. They explain that the increase in time spent with the family is compensated with reduction in time spent on other activities such as entertainment. In contrast, Evetts (1996) argues that for women there is no such complementarity. Committing to career and family life implies contradictory responsibilities. Further, she elaborates that in traditional socialization of gender roles, girls are made to believe that motherhood will feature somewhere in their future. Therefore motherhood becomes a standard expectation for girls when they grow up. In relation to this, Gardiner (1997) states that gender roles in terms of work, household functions, and parenthood constitute some important content concerning the concept of femininity and masculinity. Beliefs incorporated in the cultural dimensions of femininity can be powerful controlling forces in women's and men's adult lives.

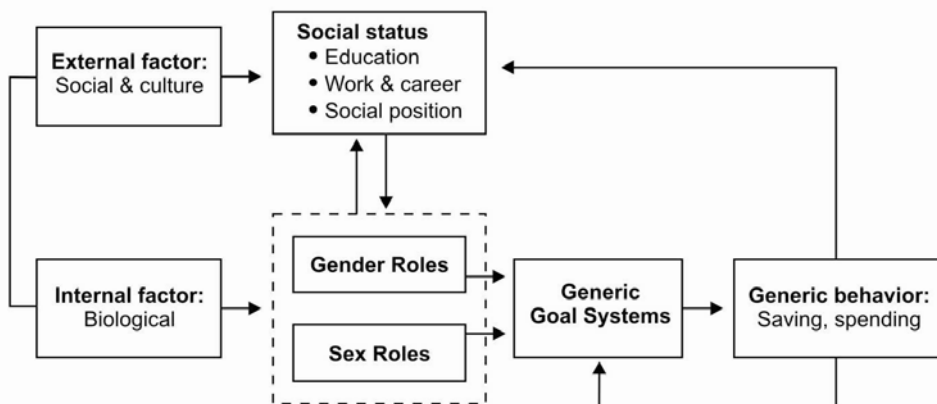


Figure 7.1. Conceptual model of the relationship between sex, gender, generic goal systems, and generic behaviour.

Nevertheless, human society changes as do gender roles. According to Korabik (1999) industrial and technological development of the Western society in the 20th century liberated women from the reproductive constraints of the traditional society. As such, more and more women spent less of their lives rearing children and more in paid employment. Consequently career aspirations became more important for working women (Stroh & Reilly, 1999). Apart from that, social life outside the family also became desirable. In addition, lifestyle may enter into the goal system of women. This change obviously affects hopes, expectancies, values and goals of women in particular, and men in relations to domestic responsibility sharing. The causal model is summarized in Figure 7.1, and explained briefly as follows.

The society with which people are socially and culturally embedded determines opportunities and constraints for men and women, in terms of what they can pursue and achieve. The illustrations regarding traditional and modern societies above demonstrate this aspect. Changes in the social-economic achievement of men and women imply changes in the gender-related roles. With more involvement in the paid-employment, reduction in the domestic roles of women is inevitable. This may also mean more involvement in the domestic responsibilities for men. Social-economic responsibilities in family and in the workplace, combined with domestic roles and responsibilities, determine generic goals of women and men, which further determine economic behaviours. Results, benefits or consequences of an economic behaviour imply achievement or failure of certain goals. In the short circuit, it provides a feedback loop to the goal. Adjustment on the goals or means of behaviour might be made. In addition, achievement of a goal might result in changes of social status for men and women. This should be followed by the adjustment in gender-related roles.

To summarize, the formation of generic goal systems is determined, among others, by sex and gender roles. Whereas sex roles are determined by biological factors, gender roles are socially constructed. Moreover, gender roles determine what are achievable to women and men, and *vice versa*. Roles implies expectations and goals, therefore sex roles and gender roles determine generic goal systems. Consumer decisions at the generic level of decision-making reflect the generic goal systems. Evaluation to consequences or benefits of a decision, provides feedback to the goal system; the consequences itself determine changes in what are achieved by the consumer.

7.3. Data and measures

7.3.1. Overview

The objective of this analysis is to establish differences and similarities in the generic goal systems of women and men. Data described in Chapter 3 will be used. Generic goal systems were elicited using the generic goal-laddering procedure (Chapter 4). Differences in the generic goal system will be examined in terms of content, organization, and structural properties. In addition, differences between the optimistic and the pessimistic groups with regards to psychological, behavioural, and demographic factors will be examined.

7.3.2. Data and measures

The data consist of goals elicited from 423 informants, but nine informants did not indicate their sexes. The final data represents 308 men and 106 women. Overall there are 8188 goals, 2384 goal chains, and 5787 direct links. The average number of goals per goal chain is 3.40. In average, women mentioned a larger number of goals (22.27 to 19.00 for men), goal chains (6.21 to 5.60), and goal links (16.00 to 13.00). In average the goal chain of women consists of 3.6 goals, whereas for men it consists of 3.4 goals. Comparisons between women and men are summarized in Table 7.1.

Table 7.1. Summary of generic goal data by gender

Data	Men		Women		Grand total	Grand average
	Total	Average	Total	Average		
N	308	-	106	-	414	-
Goal	5827	19.00	2361	22.27	8188	20.00
Goal chain	1726	5.60	658	6.21	2384	5.80
Goal link	4090	13.00	1697	16.00	5787	14.00
Average number of goal/chain	3.40		3.6		3.40	

Other measures in the analysis include psychological variables, namely attitudes toward saving and debt and consumer involvement in saving and spending (see Chapter 3). Due to the strategy to keep the workload of the participant minimum, data on these variables are only available to approximately one half of the total participants. Besides, the analysis will include two measures of economic and behavioural variables, namely consumer confidence and saving habits. Other related variables included in the analysis concerns satisfaction with household financial situations, perceptions of ability to satisfy needs, education, income level, and age.

7.4. Results

7.4.1 Comparisons on the related variables

T-tests were performed on psychological, behavioural, economic and financial, and demographic factors that may be relevant to the generic goal systems of women and men. The results are summarized in Table 7.2 As apparent from the table men and women are not significantly different in terms of psychological factors. The *t-tests* show that the differences between men and women are not significant with regards to attitudes toward saving and debt, and involvement in saving and spending. The *t-tests* also show that men and women are also not different significantly in terms of consumer confidence and saving habits. This may rule out psychological and economic behavioural factors in the differences between men and women in generic goal systems.

With regard to economic and financial perception, the *t-tests* show significant differences between men and women. Men are higher in terms of both financial satisfaction and perception of ability to satisfy needs, with $t=2.020$, $df=394$, $p<0.01$ for financial satisfaction, and $t=3.823$, $df=397$, $p<0.01$ for ability to satisfy needs. Interestingly, men are significantly lower than women on education level and income background, with $t=-4.832$, $df=399$, $p<0.01$ for education, and $t=-5.812$, $df=393$, $p<0.01$ for income level. In addition, women are significantly younger than men, with $t=2.988$, $df=399$, $p<0.01$.

The findings of significant differences between women and men on the economic and financial perception, and on the demographic backgrounds, are important to discuss. Relative to men, the pattern of the differences suggest that although women are higher on education, and therefore income level, they perceive themselves as less able to satisfy the needs, and consequently feeling less satisfied with the financial and economic situations. Questions can be raised in terms of the role of generic goal systems in mediating this pattern. The fact that women are significantly younger than men may or may not explain the discrepancies between education and income on one hand, and perceived ability to fulfil needs and financial satisfaction on the other.

Table 7.2. Differences between women and men in several psychological, behavioural, economic and financial, and demographic variables

Variable	Sex	N	Mean	SD	t	df	Sig
Psychological factors							
Attitudes toward saving	Men	173	76.35	17.10	-0.044	238	0.657
	Women	67	77.34	10.67			
Attitudes toward debt	Men	173	29.79	6.41	-0.040	238	0.968
	Women	67	29.82	4.67			
Involvement in saving	Men	90	92.18	16.45	-0.334	118	0.739
	Women	30	93.30	14.21			
Involvement in spending	Men	93	72.08	17.25	0.188	122	0.851
	Women	31	71.39	18.65			
Economic behavioural factors							
Consumer confidence	Men	162	101.12	3.62	-1.265	225	0.207
	Women	65	101.77	3.22			
Saving habit	Men	284	4.17	1.35	-1.391	383	0.165
	Women	101	4.38	0.98			
Economic and financial perception							
Financial satisfaction	Men	296	3.13	0.74	2.020	394	0.044
	Women	100	2.95	0.77			
Ability to satisfy needs	Men	299	3.34	1.25	3.823	397	0.000
	Women	100	2.80	1.20			
Demographic factors							
Education	Men	298	3.07	0.78	-4.832	399	0.00
	Women	103	3.49	0.67			
Income level	Men	295	2.18	0.90	-5.812	393	0.000
	Women	100	2.89	1.43			
Age	Men	298	44.63	7.253	2.988	399	0.003
	Women	103	42.08	8.124			

7.4.2. Contents and organization of the generic goal systems

In terms of the variety of generic goals, the content analysis shows that men and women are quite similar. All 44 goals, see Table 4.4, were mentioned by both groups. Moreover, *to save* is the most frequently mentioned goal for both men and women. It accounts for 9.55% of all goal mentions of men, and 11.29% of women. The next three most mentioned goals for women are *being prepared* (7.00%), *hassle-free* (6.45%) and *for children* (4.58%). The list of the next three goals for men contains the same goals but in different rank-order. The second most mentioned goals for men is *for children* (6.23), followed by *being prepared* (5.12%), and *hassle-free* (5.12%). The fifth and sixth most mentioned goals are in reverse order, that is, *having quality home* on the fifth for men (at 3.97%) and the sixth for women (at 3.35%), and *for housing* (3.76% for men and 3.82% for

women). These six most frequently mentioned goals account for more than one-third of all goal mentions. Differences between men and women in the rank-order of the goal frequencies may indicate gender-based differences in the formation or accessibility of generic goals.

To further examine the differences between men and women in terms of the accessibility of generic goals, chi-square analysis was performed. The proportion of men and women mentioning a generic goal at least once was compared. The analysis reveals significant differences in nine goals, namely *hassle-free* ($p < .01$), *other goals* ($p < .01$), *financial independence* ($p < 0.01$), *being prepared* ($p < .05$), *for social necessities* ($p < .05$), *medical care* ($p < .05$), *to save* ($p < .05$), *social harmony* ($p < .05$), and *being helpful* ($p < .05$). These nine goals account for 28.47% of all goals mentioned by men, and 33.65% of all goals mentioned by women. Except for *for necessities*, the proportion of women mentioning the above goals is significantly higher than of men. Table 7.3 exhibits the summary of the results.

The implication matrixes (Appendix E and Appendix F) provide data for constructing a separate hierarchical goal map for women and men. An implication matrix contains information of all direct links between two goals, along with numbers to indicate how frequently the links are mentioned. In principle it is possible to develop a goal map that represents all links. However, the goal map will be cluttered with too many lines that make it too difficult to read. The usual practice is to set a minimum number of mentions or a cut-off level for an inclusion in the goal map. The result is a hierarchical goal map that represents less than the total links in the implication matrix, but in turn becomes easier to read, and thus the relatively more important goals are easier to focus on.

Table 7.3. List of goals with significant difference between men and women

Goal	Gender				Sig.
	Male (<i>N</i> = 307)		Female (<i>N</i> = 105)		
	NO (%)	YES (%)	NO (%)	YES (%)	
Hassle-free (302)	48.5	51.5	26.7	73.3	0.000
Other goals (206)	96.1	3.9	84.8	15.2	0.000
Financial independence (331)	85.0	15.0	73.3	26.7	0.007
Being prepared (202)	51.5	48.5	37.1	62.9	0.011
For necessities (122)	64.5	35.5	77.1	22.9	0.017
Medical care (224)	85.0	15.10	75.2	24.8	0.026
To save (101)	31.9	68.1	21.0	79.0	0.033
Social harmony (362)	84.4	15.6	75.2	24.8	0.035
Being helpful (252)	88.6	11.4	81.0	19.0	0.047

The cut-off levels for the construction of goal maps of men and women are computed using the formula explained in Chapter 5. The results are summarised

in Table 7.4. The number of active cells at a certain cut-off level is equal to the number of lines in the goal map. For example, when there is no cut-off level introduced, which means all links are represented, the goal map will consist of 408 lines for women and 643 for men (see column (1)). It implies a 100% representation of the active cells (see column (3)) as well as the active links (see column (5)). Further, on Table 6.4., it is important to note that the number of links for men, at 4090 is approximately 2.5 higher than for women (1697 links). This reflects the proportion of the male participants relative to the female, although the figure indicates that the women gave slightly more goal links. To get a reasonable level of link representation as exhibited in column 4, and an equal level for men and women, the cut-off level was determined at 53% representation of all links, (column (5)). This corresponds with 40 lines for women and 43 for men.

Table 7.4. Statistics for determining cut-off levels

Cut-off	(1) Number of active cells		(2) Number of active cells as a proportion of all cells		(3) Number of active cells as a proportion of all cells mentioned at least once		(4) Number of active linkages		(5) Number of active linkages as a proportion of all linkages	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
1	408	643	0.22	0.34	1.00	1.00	1697	4090	1.00	1.00
2	212	398	0.11	0.21	0.52	0.62	1501	3845	0.88	0.94
3	140	287	0.07	0.15	0.34	0.45	1537	3623	0.80	0.89
4	98	220	0.05	0.12	0.24	0.34	1231	3422	0.73	0.84
5	81	177	0.04	0.09	0.20	0.28	1163	3250	0.69	0.79
6	63	150	0.03	0.08	0.15	0.23	1073	3115	0.63	0.76
7	54	127	0.03	0.07	0.13	0.20	1019	2977	0.60	0.73
8	51	107	0.03	0.06	0.13	0.17	998	2837	0.59	0.69
9	46	93	0.02	0.05	0.11	0.14	958	2725	0.56	0.67
10	40	80	0.02	0.04	0.10	0.12	904	2608	0.53	0.64
11	36	71	0.02	0.04	0.09	0.11	864	2518	0.51	0.62
12	34	67	0.02	0.04	0.08	0.10	842	2474	0.50	0.60
13		59		0.03		0.09		2378		0.58
14		52		0.03		0.08		2287		0.56
15		48		0.03		0.07		2231		0.55
16		43		0.02		0.07		2156		0.53

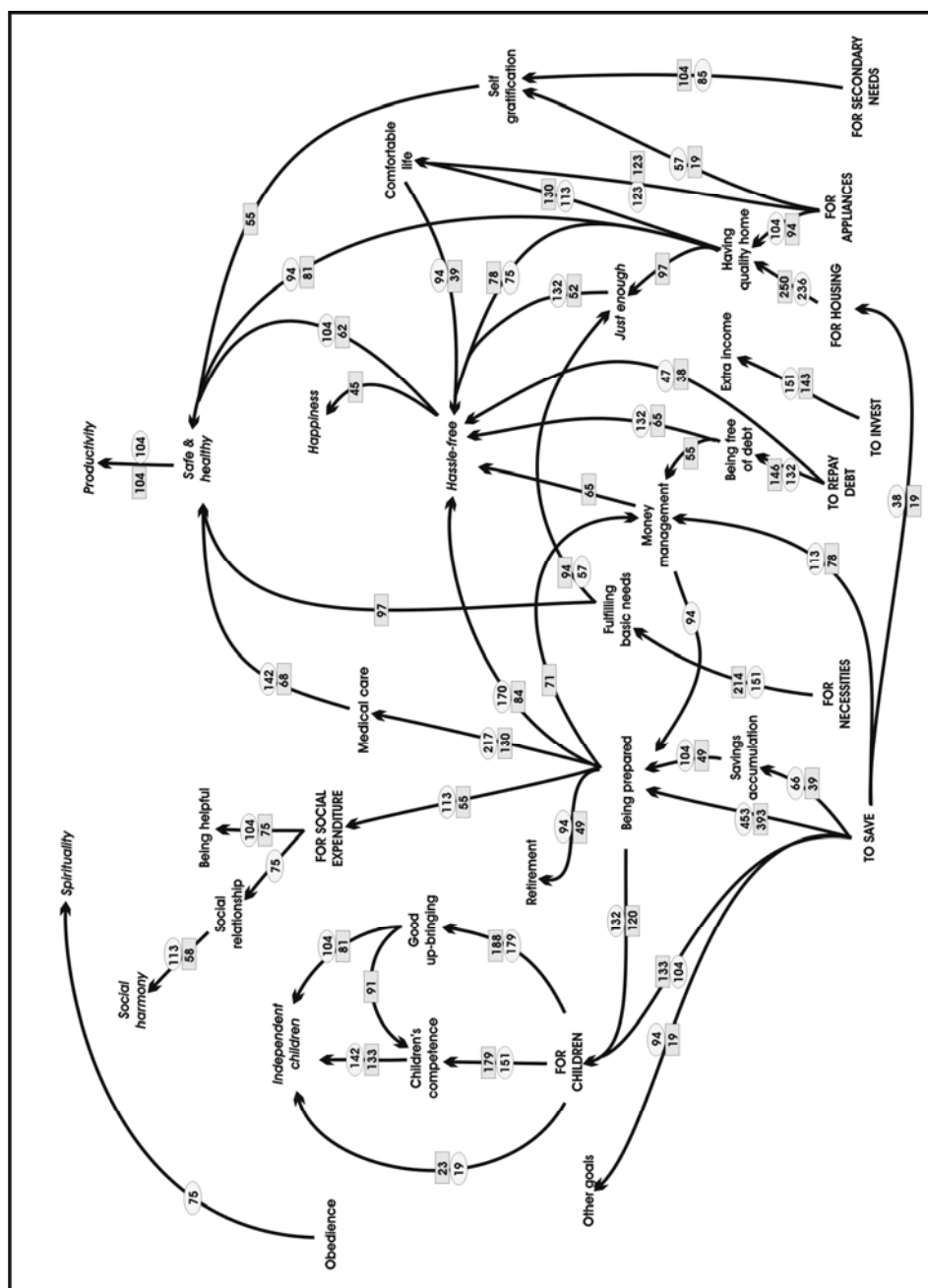
Two hierarchical goal maps (HGM) visually representing the generic goal systems of men and women were subsequently constructed. The basic arrangement of the main HGM, i.e., Figure 5.1 of Chapter 5 was maintained. Similarities in the arrangements allow the HGM of men and women to be superimposed (see Figure 7.2). Numbers inside a square represent the proportion of men that mentioned the link at least once, in per-mile ratio or 1/1000). Numbers inside an

oval represent the proportion of women. It is important to notice that the numbers do not add up to the total number of links in the implication matrixes. The discrepancies arise from the fact that an implication matrix contains all mentions of links. Some participants may mention certain links more than once.

At the 53% representation level the two HGMs are quite similar. There are 34 out of 49 lines that appear on both of the HGMs. Both groups consider *to save* in relations to *savings accumulation*, *for children*, *money management*, *for housing* and *being prepared*. Investing money that leads to extra income also appears on the HGMs of men and women. The cluster of goals starting from *for children* is almost similar for both sexes. The same observation applies to clusters of pro-social motives, *having a quality home*, *hassle-free* and *safe and healthy*. Both HGMs are relatively highly integrated, except for two lines of the women HGM and other two lines of men. *To invest* → *extra income* is separated from the main structure on both HGMs. *Obedience* → *spirituality* and *social relationship* → *social harmony* are not integrated in the HGMs of women and men, respectively. Arrows linking two goals (→) denotes functional relationship between the goals, in the sense that achieving the goal of the origin, leads or serves as a means, to achieve the destination of the arrow. Thus, for example, *obedience* as a means to achieve *spirituality*, or achieving *obedience* will lead to achieving *spirituality*.

Nevertheless, there are a number of links that are unique to each group. Six links are unique to women, namely *obedience* → *spirituality* (75), *for appliances* → *self-gratification* (57), *money management* → *being prepared* (94), *for social expenditure* → *social relationship* (75), *to save* → *for housing* (38), and *to save* → *other goals* (94). In exception to *to save*, the six unique links consists of 10 different generic goals. With regard to men, there are nine links that cannot be found in the HGM of women, namely *fulfilling basic needs* → *safe and healthy* (97), *self-gratification* → *safe and healthy* (55), *being prepared* → *money management* (71), *money management* → *hassle-free* (65), *to repay debt* → *hassle-free* (47), *hassle-free* → *happiness* (45), *good upbringing* → *children competencies* (91), *having quality home* → *just enough* (97), and *being free of debt* → *money management* (55). *Money management* and *hassle-free* each appears in three links and *safe and healthy* appears in two links. The number of parentheses indicate the ratio of informants who mention the linkage to the total number of informants, in per-mile.

In addition to the goal links that are unique to each HGM, we suspect that certain links may appear on both of the HGMs, but actually, the proportion of the group members that are mentioned are significantly different. To examine this supposition, we performed *chi-square* analysis on all types of links that appear on both HGMs. The significant results are exhibited in Table 6.5. It is interesting to notice that women are significantly higher on all of these links. Namely, there



are relatively more women who mentioned *savings accumulation* → *being prepared* (10.38% to 4.87% of men, $p<0.05$), *being prepared* → *social expenditure* (11.32% to 5.52%, $p<0.05$), *being prepared* → *medical care* (21.70% to 12.99%, $p<0.05$), *being prepared* → *hassle-free* (16.98% to 8.44%, $p<0.05$), *comfortable life* → *hassle-free* (9.43% to 3.90%, $p<0.05$), *being free of debt* → *hassle-free* (13.21% to 6.49%, $p<0.05$), *medical care* → *safe and healthy* (14.15% to 6.82%, $p<0.05$), and *just enough* → *hassle free* (13.21%, to 5.19%, $p<0.01$).

Table7.5. Chi-square test between male and female

Goal-link	Male	Female	Sig. (2-sided)
Savings accumulation → being prepared	4.87%	10.38%	0.044
Being prepared → for social expenditure	5.52%	11.32%	0.044
Being prepared → medical care	12.99%	21.70%	0.031
Being prepared → hassle-free	8.44%	16.98%	0.014
Comfortable life → hassle-free	3.90%	9.43%	0.028
Being free of debt → hassle-free	6.49%	13.21%	0.030
Medical care → safe and healthy	6.82%	14.15%	0.021
Just enough → hassle-free	5.19%	13.21%	0.006

To summarize, a large part of the generic goal systems of men and women are similar. All 44 generic goals that have been so far identified were mentioned by men and women. However, significant differences between men and women are observed at the level of linkage between-goals of the generic goal system. Six links are unique to women, containing eleven different goals. In comparison, there are nine links unique to men, containing 13 different goals. In addition, women mentioned eight types of links significantly higher than men. From these findings, several distinctive features can merit a closer attention. First, *hassle-free* appears to be an important goal to both men and women. However, women consider *being prepared*, *comfortable life*, *being free of debt*, and *just enough* as the means for achieving *hassle-free*, whereas men consider *to repay debt* as an avenue to *money management*. Second, saving money appears to serve a large variety of goals for women than for men. For women, *to save* is associated with *other goals* and *for housing*, which are absent from the generic goal systems of men. Finally, *being prepared* is both important for both sexes. The differences are that women consider *being prepared* as a means for *social expenditure*, *medical care*, and *hassle-free*, whereas for men *being prepared* is associated with achieving ability to allocate money for different basic expenses (*money management*).

7.4.3. Structural properties of the generic goal systems

Two hierarchical properties of goal maps are particularly relevant to examine, namely centrality and instrumentality of goals. Index of centrality measures the relative position of goals in a hierarchical goal system. It is computed as a ratio of *ins* and *outs* to the total number of links. The higher scores indicate the central position of a goal in the hierarchical system. Accordingly, goals can be rank-ordered from the most to the least central. Thus, differences in the position of rank-ordering between male and female groups will indicate different centrality of a goal. Table 7.6 summarizes of the results.

Table 7.6. Rank-order of Centrality and Instrumentality

Goal	Centrality		Instrumentality	
	Men	Women	Men	Women
To invest	20	30	10	17
To repay debt	22	27	9	8
For necessities	15	31	5	9
For social expenditure	29	18	20	10
Savings accumulation	25	20	24	20
Improved life	26	37	25	31
Other goals	41	22	35	24
Extra income	17	19	19	25
Comfortable life	9	6	12	7
Fulfilling basic needs	6	10	8	13
Medical care	32	26	28	27
Good up-bringing	11	17	15	21
Independent children	14	13	23	28
Self-gratification	18	12	17	15
Social relationship	38	23	31	26
Being helpful	33	24	29	23
Self-realization	23	33	32	32
Financial independence	34	32	39	35
Family harmony	31	40	36	43
Prudence	28	39	30	40

In general, the order of the indexes of centrality is relatively similar in both groups. Of the 44 goals, the rank position of 29 goals are almost the same (difference of less than 5 ranks), or even identical. Nevertheless, the remaining 15 goals are slightly or even significantly different. Among the slightly different goals are: *to repay debt*, *savings accumulation*, *medical care*, *good up-bringing*, *self-gratification*, *being helpful*, and *family harmony*. For example, *self-gratification* is ranked 22nd for men, which is higher, compared to rank 27 for women. Thus, *self-gratification* can

be interpreted as slightly more central to men as to women. It can be assumed that the larger discrepancy implies larger difference in the centrality of a goal. In this regard, it is important to notice eight goals that are highly different in terms of the positions in the centrality index. Five goals are significantly more central in the generic goal systems of men, namely *to invest* (20th compared to 30th), *for necessities* (15th to 31st), *improved life* (26th to 37th), *self-realization* (23rd to 33rd) and *prudence* (28th to 39th). In contrast, three goals are more central to women than men, namely *for social expenditure* (18th compared to 29th), *other goals* (22nd vs. 41st), and *social relationship* (23rd vs. 38th). Overall, the centrality index appears to indicate that men's generic goals are more centred on the utilitarian and pro-self values, whereas women more on the pro-social values and variety consumption.

Another property of the generic goal system concerns instrumentality in the context of achieving overall goals. Goals can be distinguished in terms of the degree to which they function as a means to achieve other goals. The index of instrumentality is computed as the ratio between *outs* (the frequency that a goal is connected to other goals in the position of the origin of interconnection) and overall interconnection in the goal system. The higher the score of a goal on an index of instrumentality, thus the larger its function as an instrument or means to achieve overall goals. In other words, the index of instrumentality indicates the important means for the consumer in their goal-pursuit behaviour.

The right hand side of Table 7.6 exhibits the selected results of the instrumentality calculations. As in the centrality index, differences in rank-order of men and women goal systems are highlighted. Out of 44 goals, 31 goals are identical or at least almost identical, in the sense that the rank discrepancies are less than 5 points. However, there are ten goals that are moderately different between the groups, namely *to invest*, *improved life*, *extra income*, *comfortable life*, *fulfilling basic needs*, *good up-bringing*, *independent children*, *social relationship*, *being helpful*, and *family harmony*. There are only three goals with significant discrepancies between men and women. *For social expenditure* (10th to 20th) and *other goals* (24th to 35th) in particular, are significantly more instrumental in the generic goal systems of women. For men, *prudence* is significantly more central (30th relative to 40th). The instrumentality index appears to suggest the same pattern of differences between the generic goal systems of men and women. Men appear to be more focused on the utilitarian values, whereas women focus more on the pro-social values and variety consumption.

7.5. Discussion

Differences in the content, organization, and structural properties of the generic goal systems of women and men have been examined. The results dem-

onstrate that men and women are relatively similar in terms of the structural and overall components of the generic goal system. Both goal systems are relatively highly integrated and each consists of almost the same components. However, there are significant differences between the two generic goal systems in terms of the specific orientations in the goal system. Whereas the generic goal systems of men contain more utilitarian and pro-self values, women exhibit higher affinities to pro-social values and goals of variety consumption. In addition to generic goal systems, men and women are found to be significantly different with regards to age, education, income level, satisfaction regarding financial and economic situations of the household, and perception of ability to satisfy needs. Men and women are not significantly different with regards to attitudes towards saving and debt, involvement in saving and spending, and in saving habits. Each of these findings will be discussed in relation to the proposed model of gender role and generic goal systems (Figure 7.1).

The observed similarities between the generic goal systems of men and women are expected. The generic goal systems identified in Chapter 5 remarkably exhibit organized structures. In addition, the generic goal systems also demonstrate high functional relationships between competing goals. Organization and functional relationship of multiple goals are required for an effective functioning of individuals (Kruglanski et al., 2002; Austin & Vancouver, 1996). Besides, gender implies an identity and a self-concept (Connell, 2002; Helgeson, 2005), which require coherence in behaviour across situations and stability over time (Cervone, 2004, 2005). Therefore, it is hardly likely that the structure and general properties of goal systems of men and women are different.

Nevertheless, differences in the contents and how goals are functionally related to other goals are expected; gender differences imply different roles and expectations. The first distinctive feature concerns the discrepancy between pro-self and pro-social motives. Pro-self motives or goals are more prominent in the generic goal systems of men. For example, *self-realization* and *improved life* are significantly more central to men than women. In contrast, *social relationship* is more central to women, and *social relationship* and *for social expenditure* are both more central and instrumental. Gender literature supports these findings. For example, men and women are known for differences in the area of social relationship and achievement (Helgeson, 2005). Phenomena such as the Glass Ceiling in organizational career (Powell, 1999) and the fear of success (Helgeson, 2005) are more common in women, but relatively absent in the life of men.

The analysis indicates that utilitarian values are more prominent in the generic goal systems of men than in women. For example, *to invest*, *for necessities* and *prudence* are more central to men. In addition, *prudence* is also more instrumental

in the men's goal systems. This is compared to the non-utilitarian motives that are more prominent in the women's goal system, such as the pro-social goals explained above. In addition, purchases of varieties of other goals, which are represented in *other goals*, are more central to women. This might be explained by the traditional position of men as the bread-winner in the household. This explains why utilitarian values are more prominent in the generic goal systems of men than women. The non-utilitarian values in women, i.e., pro-social and variety of consumption, might be explained by the availability of discretionary income. The fact is that female participants are all career-persons, of higher education than the male participants, and obtain a higher level of income. On top of that, they may not necessarily be the main bread-winner in the household. Discretionary income allows women to venture into non-utilitarian or more hedonic motives.

Differences in goal orientations also manifest in what at first appears to be a similar feature of the generic goal system. An example concerns *hassle-free*. The meaning of this goal refers to conditions in which people do not have to experience annoyances because of, for example, a lack of money for small and big purchases, money for fulfilling social and financial responsibilities, and possession of essential tools for household chores. The index of centrality shows that *hassle-free* can be an important focal goal for the more sub-ordinate goals, as well as an important means for the more super-ordinate goals. It is not surprising that *hassle-free* is an important goal to both men and women. However, the male participants conceived different means for achieving *hassle-free* compared to women. For men, *to repay debt* and *money management* are the important means. Whereas for women, the important means are *comfortable life*, *being free of debt*, *just enough*, and having precautionary savings. This aspect of the findings provides further supports to the notion of utilitarian versus non-utilitarian values in men and women, respectively. Notice the position of *comfortable life*. The hierarchical goal map suggests that *comfortable life* is achieved through the possession of appliances and having a quality home. There is an intermediary psychological state between economic actions (or action goals) and the focal goal (i.e., *hassle-free*) that is more prominent in the generic goal systems of women. Considering that *comfortable life* concerns positive experiential aspects of consumer life, this finding suggests experiential or hedonic values as more prominent in women than in men.

Another example of what goals appears to be similar but in fact they have different meanings to women and men, concerns saving motives. Saving money is important in both the men's and women's generic goal systems. It is associated with *being prepared*, having *saving accumulations*, a way of *money management*, and reserved funds for children. Women mentioned two other goals in relation to *to save*, namely *for housing* and *for other goals*. In addition to this, *being prepared* is

very important to both sexes (see index of centrality), but it serves different functions. *Being prepared* is equally instrumental to men and women in terms of achieving *assured retirement*, and meeting expenses for children. On top of that, men consider *being prepared* as an important aspect of *money management*, more than what is indicated in the goal systems of women. In comparison, women associate *being prepared* with social expenditures, *medical care*, and *hassle-free*. It appears that to men, the objective of saving, or saving motives, is to be prepared for unexpected expenditures, which reflects more precautionary motives. For women, the objective of saving is more on satisfying certain goals, which signifies motives of goal saving. Thus, to women and men, the significance of saving motives, i.e., Keynes (1936/1964), Katona (1975), Browning (1996), and Nijkamp, Gianotten and Van Raaij (2002), are different.


7.6. Chapter summary

This study has demonstrated that the generic goal systems of men and women are different. However, the difference is more in the degree rather than in a categorical sense. The organization and the structural properties of both goal systems are similar. Men and women are different in terms of goal orientation and values. Whereas utilitarian values and precautionary motives are found to be more prevalent in the generic goal systems of men, pro-social, non-utilitarian orientations that may resemble hedonic motives are more prevalent in the generic goal systems of women. These findings suggest that the relationship between sex, gender roles, and generic goal systems as depicted in Figure 7.1 is supported. Regarding the broader issue of gender differences in economic behaviour, these findings should be interpreted within the strict demographical boundaries of this study. Both men and women work for the government and as such, earn stable income. Different conclusions might be obtained with a sample of different demographic backgrounds.



Chapter 8

Consumer confidence and generic goal systems



Summary: Consumer confidence indexes have demonstrated robust predictions on important macroeconomic conditions. As such, it has become valuable information to policy makers as well as business and financial media. However, the informational content of the index is still debated. One group argues that the indexes capture no more than individual opinion regarding economic and financial situations of the household and nation. Therefore it can be replaced by some objective economic indicators. The opposite group claims that there is substantive information in the indexes. Consumer confidence indexes capture general attitudes and expectations towards economic and financial situations that determine individual saving and spending decisions. This study represents an empirical examination into the issue. Based on the regulatory focus theory, this study proposes generic goal systems as the psychological factor that mediates between the measured confidence level and the economic behaviour of the consumers. The generic goal systems elicited from individuals, identified as optimists, is compared to the generic goal systems of the pessimists. The results demonstrate significant differences in terms of content, organization, and structural properties of generic goal systems. In general, optimism is associated with hedonic and pro-social motives, whereas pessimism is associated with utilitarian and debt-repayment motives. Similarities between the two goal systems signify the robust values of stable consumption over time. We argue that the finding supports the notion that generic goal systems represent the informational content of the consumer confidence indexes.

8.1. Introduction and motivation

Consumer confidence might be the only psychological variable that has gained status of an economic indicator. Moreover, it is ranked among the most

watched economic indicators (Mehra & Martin, 2003). In many countries, regular surveys on consumer confidence are conducted by major institutions. In The US, the first series of regular surveys were conducted by the Survey Research Center of the University of Michigan, and since 1968 by the Conference Board. In the Netherlands, survey is conducted regularly since 1972 by the Central Bureau of Statistics (Van Raaij & Gianotten, 1992). The Commission of the European Communities administered the surveys since 1973 for its member countries. In Australia, the survey is conducted by the institute of Applied Economic and Social Research since 1973 (Zagórski & McDonnell, 1995). In each of these countries, the release of the survey data is eagerly awaited by the press, business people, and policy makers (Ludvigson, 2004; Dominitz & Manski, 2004).

A part of the popularity might have been built on the ability of the confidence index to predict economic downturns (Ludvigson, 2004; Matsusaka & Sbordone, 1995). Regular surveys over the years demonstrated that periods of recessions were preceded temporally by a sharp decline in consumer confidence, as measured by the two indexes. However, economic recovery precedes the increase in consumer confidence by a couple of months. This pattern indicates that consumer confidence is better in predicting an economic downturn than a recovery. In addition, changes in consumer confidence have statistically significant effects on GNP fluctuation, even after controlling for economic fundamentals and other predictors of GNP in the United States between 1953-1988 (Matsusaka & Sbordone, 1995). Consumer confidence data also predicts micro data of household expenditure (Souleles, 2004). Gulley and Sultan (1998) claimed that the consumer confidence announcement during 1980-1993 appeared to influence the Dow-Jones Industrial Average, although not the case for bonds or other stock indexes. Carroll, Fuhrer and Wilcox (1994) found that past values of the University of Michigan Consumer Sentiment Index can help explain current changes in consumer spending. Evidence from empirical research, both with macro and micro data, appear to be overwhelming. For contradictory claims, see e.g., Al-Eyd, Barrel and Davis (2009), Croushore (2006), Berry and Davey (2004).

The consumer confidence index (CCI) also has been used for explaining other aggregate level behaviours, namely crime rate. Rosenfeld and Fornango (2007) used CCI as an indicator for macroeconomic conditions in explaining robbery and property crime. They tested the hypothesis that collective perceptions of economic hardship bear some consequences on the crime level. They examine relationship between CCI and regional robbery, burglary, larceny, and motor vehicle theft rates in the United States between 1970 and 2003. They found that consumer confidence had significant effects on robbery and property crime rates, even after controlling the effects of unemployment and economic

growth. Overall, they conclude that the effects of collective economic perceptions should become an important focus of future research on crime trends.

Zagórski and McDonnell (1995) demonstrated that Consumer Confidence Indexes are good social indicators. The indexes reflect subjective opinions of people regarding their welfare and life conditions. Changes in the consumer confidence reflect sensitivity to real changes in the economy as well as welfare situations. Therefore consumer confidence indexes are good predictors of social attitudes, especially political party preferences. Their analysis to empirical data showed that the overall index indicates social attitudes better than its components.

For all of its prominence, however, the informational content of consumer confidence is still contentious (Vuchelen, 2004; Ludvigson, 2004; Berry & Davey, 2004). Do consumer confidence surveys contain meaningful independent information about the economy? Or, does an index of consumer confidence simply represent information already captured in the traditional economic and financial indicators. In the latter case, the index could be replaced by other economic and financial indicators that are always available timely.

According to Vuchelen (2004), there are two opposing views, namely restrictive and broad views. In general, proponents of the restrictive view argue that CCI reflects nothing else but the answers to the survey question. Thus the index captures the opinion consumers hold on their situations and on the general economic conditions, currently and in the future. This statistically corresponds with changes in the macro-economy. However, the psychological or social underpinning of this particular statistical correspondence is unknown. Therefore the position of CCI in an economic forecasting model can be replaced by other economic and financial variables (e.g., Berry & Davey, 2004; Croushore, 2006; Mehra & Martin, 2003).

The broad view is represented, among others, by Katona (1951, 1975). He argues that consumer confidence index reflects not only economic conditions, but more broadly the subjective state of mind of consumers, or consumer confidence. It is an independent determinant of consumer spending, in the sense that changes in consumer attitudes causes fluctuations in the economy (Carroll, Fuhner & Wilcox, 1994). Thus it embodies what is called by Keynes (1936/1964) as the “animal spirit” in the economic behaviour. Van Oest and Franses (2008) argue for a broader interpretation of the consumer indexes. According to them, a consumer index serves as an intermediary variable between the numerous pieces of information consumers digest (for example newspaper, radio and television), the triggering stimuli, as well as decisions of expenditure.

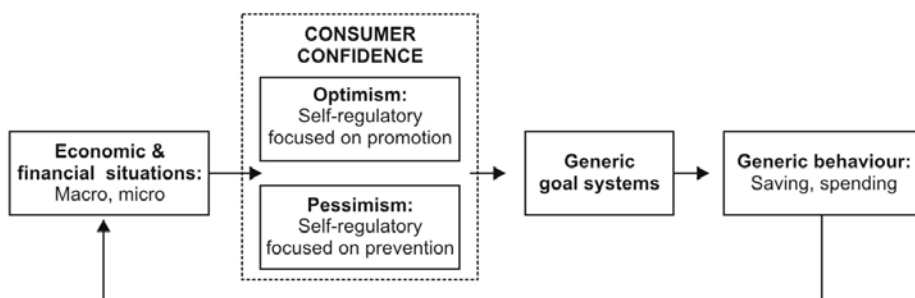


Figure 8.1. Conceptual model of the relationship between consumer confidence and generic goal systems.

Toward this end, no empirical effort has been spent on examining the so called, ‘informational content’ of the consumer confidence index. Arguments are mostly based on assumptions, given the pattern of the observed data. An exception is the study of Toussaint-Comeau and McGranahan (2006) that examine differences in consumer confidence across some demographic groups. Their finding reveals that the level of consumer confidence is different with regard to both the personal and general situations. This implies that groups have different views not only on their own outlook, but also on the outlook of their country as a whole.

Robust differences between groups provide strong indications that the informational content of the index of consumer confidence is substantial. Demographic variables may also determine differences in consumer confidence. However, this argument may lead to a pitfall to the position of the indexes. If demographic background is all that is associated with the informational content of the indexes, surveys could be replaced by demographic data. This is hardly justifiable. Nevertheless, a different way of looking at the case is required. That is, rather than placing consumer variables as dependent variables, we need to view it as an independent variable. Consumer confidence needs to be approached as a causal factor to some aspects of consumer behaviours.

Towards this end, we propose that the generic goal system constitutes the intermediary variable. Confidence or lack of confidence, in current and future, financial and economic situations of the household and the economy as a whole, bears direct consequences to the likelihood that some desired states (or goals) will be attained. Given that consumers potentially have infinite numbers and types of goals, most goals are latent in the mental system of the consumer (Austin & Vancouver, 1996). They become active upon encountering functionally related situations, reflecting the principle of selective activation of goals. Built on this, we propose that consumer confidence activates generic goal systems; different levels of confidence activates different types of goals and organizational properties.

8.2. Self-regulatory mechanisms of optimism and pessimism

Regulatory focus theory (Higgins, 1997, 1998) and the goal setting framework of consumer behaviour (Bagozzi & Dholakia, 1999) are applied to characterize the types of generic goals that are distinctively associated with optimism and pessimism regarding the economic and financial situations. Regulatory focus theory is built on the foundation of the hedonic principle of human behaviour. The theory suggests that the hedonic principle can be viewed from three perspectives, namely the principle of regulatory anticipation, regulatory reference, and regulatory focus (Pham & Higgins, 2005). According to the principle of regulatory anticipation, expectations or anticipations of future outcomes or events influence decisions regarding behaviour. A positive expectation leads to approach behaviours, while negative expectations lead to avoidance behaviours. Thus, an expectation provides people with a point of reference towards which they orientate their behaviour. That is, they determine whether something is desirable or undesirable given the outlook of the corresponding condition. Finally, regulatory focus captures the self-regulatory mechanism in which people take strategic means with regard to the anticipated outcomes and points of reference. A goal is achieved through strategic means that are focused on approaching the desired ends, or strategic means that are focused on avoiding the undesired ends. Strategic approach and avoidance is meant to signify promotion- and prevention-focused self-regulatory mechanisms in goal-driven behaviours. A more detailed account of the theory can be found in section 2.4.5 of this dissertation.

Higgins (1998) argues that promotion and prevention focuses on self-regulatory mechanisms which consist of cognitive and motivational factors. This implies that the cognitive aspects of the self-regulatory mechanism facilitates external factors, such as macro- and micro-economic and financial situations, in exerting influence in the formation of generic goal systems, and subsequently in decision-making at the generic level. Given that consumer confidence reflects attitudes towards economic and financial situations (Katona, 1975; Van Oest & Franses, 2008), its functions in the formation of generic goal systems are straightforward. The goal setting and goal pursuit framework of consumer behaviour (Bagozzi & Dholakia, 1999), provides an analytical model for examining the function of consumer confidence in the formation of generic goal systems.

By being in an optimistic or otherwise pessimistic mood, people begin to contemplate “**What** are the goals I can pursue, and **why** do I want to pursue them?” (Bagozzi & Dholakia, 1999). The question implies two aspects of goals related respectively to the *what* and *why* of the question. The answer to why someone pursues a goal reflects the values, principles, or faith that he or she believes in. According to Rokeach (1973), values, principle, and faith are relatively stable. In

contrast, what goals someone can pursue concerns actions of which its advisability is contingent upon the situation. Different situations lead to different types of goals and actions. Therefore it changes with the changes in the individual's perceptions regarding the environmental conditions.

Nevertheless, certain goals are values appear to be independent of the situation. For example, economic theories emphasize a stable or increasing level of consumption over the lifetime, as asserted in the life-cycle hypothesis and permanent income hypothesis (Modigliani & Brumberg, 1954; Friedman, 1957). Spending and saving are means for achieving inter-temporally stable levels of consumption. Given a reasonably perfect time-horizon in planning, it follows that short-term changes of income and expenditure should not influence an individual's decision. However, overwhelming evidence from research shows that individuals are myopic, having inconsistent time-preference, and lack of self-control (e.g., Thaler & Shefrin, 1981; Shefrin & Thaler, 1988; Loewenstein & Thaler, 1989). It appears that consumers fundamentally value stable or increasing levels of consumption, but specific situations and certain circumstances affect consumer preferences that deviate from the fundamental values.

According to the goal-setting framework of consumer behaviour (Bagozzi & Dholakia, 1999), what goals an individual can pursue in a given situation represents action goals. There are two factors that determine the choice of action goals, namely internal and external factors. An internal factor concerns needs, wants, desires, and goal orientations that are, according to Austin and Vancouver (1996), latent in the mental system of an individual. The external factors of action goals concern the environments that offer opportunities and imperatives to the consumers. Opportunities reflect things that are achievable in a given situation. By definition, an opportunity is associated with improvement, for example improvement in the economic and financial conditions of consumers. It is plausible to assume that perceived opportunities in the environment will induce an optimistic feeling and an increase of confidence.

With regards to consumer confidence, optimism reflects feelings of certainty over future outcomes (e.g., Katona, 1975; Matsusaka & Sbordone, 1995). It can be assumed that behaviour under the condition of optimism is regulated through promotion focused self-regulatory mechanisms (Higgins, 1998; Pham & Higgins, 2005). Under this orientation, people try to maximize the attainment of available opportunities. In the concept of signal detection theory (McNicol, 1972; Coombs, Dawes & Tversky, 1970), self-regulation is directed at maximizing *hits* and minimizing *errors of omission*. In other words, the individual becomes more sensitive to the presence or absence of positive outcomes. As such, it is more likely to be associated with action goals that are related to spending behaviour.

External environment also presents individuals with imperatives (Bagozzi & Dholakia, 1999). It captures the minimum level of consumption, with regard to the desired stability over time. Pessimistic outlooks of economic and financial situations are likely to increase feelings of uncertainty over the ability to satisfy needs (Katona, 1975; Matsusaka & Sbordone, 1995). Therefore precautionary motives become more psychologically accessible, implying that saving goals are more desirable. In a signal detection framework, individual behaviour will be self-regulated towards maximizing *correct rejection* and avoiding *false alarm*. People tend to become wary of overconsumption.

Figure 8.1 represents the model that links economic and financial situations, consumer confidence, self-regulatory focus, generic goal systems, and economic behaviour. Based on this, we hypothesize that optimism and pessimism induce different focus of self-regulatory mechanisms, and hence different accessibility of goals and goal systems. Optimism brings salient spending goals, whereas pessimism induces saving goals. With regards to the stability and malleability of goals and goal systems, it is hypothesized that the sensitivity to optimism and pessimism are more pronounced at the level of action or sub-ordinate level of goals than the super-ordinate level or values.

8.3. Data and measures

8.3.1. Overview

The objective of this study is to test the hypothesis regarding differences in the generic goal system in relations to consumer confidence. Participants will be categorized into the optimistic and pessimistic groups, based on the score on the consumer confidence questionnaire (Chapter 3). The generic goal systems of 416 participants were elicited using the generic goal-laddering procedure (Chapter 4). Differences in the generic goal systems will be examined in terms of content, organization, and structural properties. In addition, differences between the optimistic and the pessimistic groups with regards to psychological, behavioural, and demographic factors will be examined.

8.3.2. Data and measures

Scoring on the consumer confidence questionnaire results in 235 participants scored positive, 116 scored negative, and the remaining 72 participants scored zero. Three groups were created, namely the optimistic (OPM), pessimistic (PSM), and neutral groups, respectively. Only the generic goal systems of the first two groups will be analyzed. The neutral group is excluded from further analysis with the objective of magnifying the effect of expectation on consumer goal systems.

The resulting data can be described as follows. The two groups are not significantly different on a number of aspects. The average number of goals per participant is 20.3 for OPM and 19.8 for PSM. The generic goals of OPM consist of more goal chains, with an average of 5.91 goals per participant, compared to 5.70 for PSM. The average goal link per participant is exactly the same, which is 14.00. In addition, the difference in the average number of goal per chain is relatively small, 3.44 and 3.47 for the respective groups. Table 7.1 summarizes the information.

Table 8.1. Summary of generic goal data by consumer confidence

Data	Optimistic (OPM)		Pessimistic (PSM)		Grand total	Grand average
	Total	Average	Total	Average		
N	235		116		351	
Goal	4775	20.30	2291	19.80	7066	20.05
Goal chain	1389	5.91	661	5.7	2050	5.80
Goal link	584	14.00	417	14.00	1001	14.00
Average number of goal/chain	3.44		3.47		3.45	

Other measures in the analysis include psychological variables, namely attitudes toward saving and debt and consumer involvement in saving and spending (see Chapter 3). Due to the strategy to minimize the workload of the participants, data on these variables are only available to approximately one half of the total participants. However, data on saving habits, satisfaction with household financial situations, perceptions of ability to satisfy needs, education, income level, and age of the total participants are available.

8.4. Results

8.4.1. Comparisons on the related variables

Table 8.2 summarizes the results of the analysis. *T-test* shows that OPM and PSM are not significantly different in terms of attitudes toward saving ($t=0.91$, $df=202$, $p>0.05$) and attitudes toward spending ($t=-0.32$, $df=202$, $p>0.05$). However, OPM and PSM significantly differ, with regards to consumer involvement in saving and spending, and in saving habits. The average scores of OPM on the involvement in saving and spending are higher than PSM, with $t=2.04$, $df=99$, $p<0.05$ and $t=2.03$, $df=102$, $t=<0.05$, respectively. OPM is also higher with regards to saving habits, with $t=3.32$, $df=329$, $p<0.01$.

Significant differences between OPM and PSM are also observed with regard to the perceptions on economic and financial situations. Interestingly, PSM is higher on both financial satisfaction and perception regarding the ability to

satisfy needs, with $t=-5.86$, $df=338$, $p<0.01$ and $t=-7.45$, $df=340$, $p<0.01$, respectively. With regard to demographic factors, PSM is also higher on the education level, with $t=-2.04$, $df=341$, $p<0.05$. However, OPM is found to be higher on the income level, with $t=2.63$, $df=338$, $p<0.01$. The two groups are not significantly different in terms of age.

Table 8.2. Differences between the optimistic (OPM) and pessimistic (PSM) groups in psychological, behavioural, economic and financial, and demographic variables

Variable	Sex	N	Mean	SD	t	df	Sig
Psychological and behavioural factors							
Attitudes toward saving	OPM	143	77.78	16.879	0.913	202	0.363
	PSM	61	75.61	12.024			
Attitudes toward debt	OPM	143	29.78	6.081	-0.317	202	0.751
	PSM	61	30.07	5.147			
Involvement in saving	OPM	67	95.67	13.181	2.040	99	0.044
	PSM	34	89.91	13.853			
Involvement in spending	OPM	67	73.72	18.238	2.032	102	0.045
	PSM	37	66.70	13.964			
Saving habit	OPM	221	4.39	1.259	3.320	329	0.001
	PSM	110	3.90	1.270			
Economic and financial perception							
Financial satisfaction	OPM	225	2.91	0.665	-5.851	338	0.000
	PSM	115	3.38	0.790			
Ability to satisfy needs	OPM	228	2.88	1.143	-7.449	340	0.000
	PSM	114	3.87	1.194			
Demographic factors							
Education	OPM	228	3.24	0.749	-2.041	341	0.042
	PSM	115	3.06	0.764			
Income level	OPM	225	2.44	1.097	2.630	338	0.009
	PSM	115	2.13	0.923			
Age	OPM	231	43.74	7.420	-1.068	341	0.286
	PSM	112	44.66	7.627			

The analysis results in several interesting patterns. First, the pessimistic group is higher on education, financial satisfaction and ability to satisfy needs, but lower on their income level. In addition, PSM is lower on saving habits, and in consumer involvement in saving and spending. This pattern merits a further discussion, especially with regards to the generic goal system.

8.4.2. Contents and organization of the generic goal system

Overall, the generic goal systems of optimistic (OPM) and pessimistic people (PSM) are quite similar. In exception for one particular goal, *for insurance*, all 44 goals (see Table 4.4) are present in both goal systems. Eight of the ten most

mentioned goals are the same for both groups, but of different order, namely *to save* (most mentioned for both groups), *being prepared* (2nd for OPM, 3rd for PSM), *for children* (3rd for OPM, 2nd for PSM), *hassle free* (4th for both groups), *having quality a home* (5th for OPM, 6th for PSM), *for housing* (6th for OPM, 9th for PSM), *safe and healthy* (7th for OPM, 10th for PSM), and *just enough* (10th for OPM, and 5th for PSM). In addition, *for appliances* is the 8th most mentioned goal for OPM, whereas it is 15th for PSM. *Comfortable life* favoured at the 9th by OPM, but a mere 18th for PSM. This observation indicates some differences in goal orientation of the optimistic and pessimistic groups.

Table 8.3. List of goals with significant differences between the optimistic and pessimistic participants

Goal	Consumer confidence				Sig. (2-sd)	Sig. (1-sd)
	Optimistic (%)		Pessimistic (%)			
	Yes	No	Yes	No		
To repay debt (121)	12.3	87.7	32.8	67.2	0.000	0.000
Being free of debts (221)	12.3	87.7	26.7	73.3	0.001	0.001
For social expenditure (151)	23.0	77.0	9.5	90.5	0.002	0.001
Being helpful (252)	17.4	82.6	6.0	94.0	0.003	0.002
Social relationship (251)	16.2	83.8	6.9	93.1	0.015	0.010
Social harmony (362)	20.9	79.1	10.3	89.7	0.015	0.009

Although a goal may be present in both goal systems, the proportion of it being mentioned by members of a group might be different. To test this conjecture, chi-square tests were performed on all goals except *for insurance*. The selected results are exhibited in Table 8.3. The table shows that there are six goals on which OPM and PSM are significantly different. OPM is significantly higher in four goals, namely *for social expenditure* (23% compared to 9.5%, $p<0.01$), *being helpful* (17.4% to 6%, $p<0.01$), *social relationship* (16.2% to 6.9%, $p<0.05$), and *social harmony* (20.9% to 10.3%, $p<0.05$). In comparison, PSM is significantly higher on two goals, namely *to repay debt* (32,8% compared to 12,3%, $p<0.01$) and *being free of debt* (26,7% to 12,3%, $p<0.01$).

These results indicate that the generic goal system of the optimistic people are more inclined towards spending goals. As apparent from Figure 8.2 below, *being helpful*, *social relationship*, and *social harmony* are connected directly and indirectly to *for social expenditure*. Since these goals signify needs of socialization, another implication from this finding is that optimistic sentiment would allow social needs to be more accessible in formation of the generic goal system. In contrast, pessimistic sentiment is associated, as predicted, with precautionary motives. *Being free of debt* is a desired state for PSM, and therefore *to repay debt* becomes more of a salient action goal than to OPM. There appears no indication of

comparison of both groups, on the remaining goals that would provide an argument to disqualify this reasoning.

Table 8.4. Statistics for determining a cutoff level

Cut-off	(1) Number of active cells		(2) Number of active cells as a proportion of all cells		(3) Number of active cells as a proportion of all cells mentioned at least once		(4) Number of active linkages		(5) Number of active linkages as a proportion of all linkages	
	OPM	PSM	OPM	PSM	OPM	PSM	OPM	PSM	OPM	PSM
1	584	417	0,31	0,22	1,00	1,00	3377	1624	1,00	1,00
2	353	224	0,19	0,12	0,60	0,54	3146	1431	0,93	0,88
3	252	139	0,13	0,07	0,43	0,33	2944	1261	0,87	0,78
4	181	96	0,10	0,05	0,31	0,23	2731	1132	0,81	0,70
5	143	68	0,08	0,04	0,24	0,16	2579	1020	0,76	0,63
6	125	51	0,07	0,03	0,21	0,12	2489	935	0,74	0,58
7	104	46	0,05	0,02	0,18	0,11	2363	905	0,70	0,56
8	87	41	0,05	0,02	0,14	0,10	2244	870	0,66	0,54
9	77	37	0,04	0,02	0,13	0,09	2164	838	0,64	0,52
10	70	34	0,04	0,02	0,12	0,08	2101	811	0,62	0,50
11	58	32	0,03	0,02	0,10	0,08	1981	791	0,59	0,49
12	53	26	0,03	0,01	0,09	0,06	1926	725	0,57	0,45
13	50	25	0,03	0,01	0,09	0,06	1890	713	0,56	0,44
14	47	25	0,02	0,01	0,08	0,06	1851	713	0,55	0,44
15	43	21	0,02	0,01	0,07	0,05	1795	657	0,53	0,40
16	42	19	0,02	0,01	0,07	0,05	1780	627	0,53	0,39
17	41		0,02		0,07		1764		0,52	
18	40		0,02		0,07		1747		0,52	
19	37		0,02		0,06		1693		0,50	

Appendix G and Appendix H are used to construct the hierarchical goal map of OPM and PSM, respectively. The cut-off levels for the two goal maps are calculated using statistics showed in Table 8.4. As apparent from the table, the two groups are quite different in terms of the number of active cells, which captures the types of direct connections between the two goals. Whereas OPM mentioned 584 types of direct connections, PSM only mentioned 417. However, most of these direct connections are unique in the sense that they are mentioned by a few people. The drop in the numbers of column (1) from cut-off 1 to 2 showed that there are 231 types of direct goal connections that are mentioned only once among OPM, and 193 types among PSM. Comparing the reduction of the types of links with the number of individuals in each group, it is obvious that individuals may mention more than one unique goal link.

The fact that most of the direct connections are unique requires a certain cut-off level to keep a reasonable number of direct connections in the hierarchi-

cal goal map. A kind of trade-off between readability and representativeness must be made in deciding the cut-off level. Allowing too many direct connections, which means a lower cut-off level, will imply too many lines to be constructed. As a result, the map will become cluttered and difficult to read. The problem is similar to deciding which scale of resolution to use when we try to find a place on a map. If we want to find a small town in a country, we do not need a map with a scale that allows streets to appear. In contrast, such scale of the map would be needed when we are looking for a certain address, at the cost of having limited coverage of the area.

Based on Table 8.4., we determined the cut-off level that would represent 52% of all direct connections for each of the groups. This corresponds with 41 types of links for OPM and 37 lines on the goal map of PSM. The resulting goal maps are then superimposed. The result is demonstrated in Figure 8.2. Numbers inside squares represent the proportion of members within the PSM that mentioned the type of direct connection, in per-thousand ratio. Numbers in the oval-forms represent the same ratio for OPM. Since an individual may mention a type of direct connection more than once, the numbers of this goal map will not add up to the figures mentioned in Table 8.4.

From Figure 8.2 it is apparent that at the representation level of 52%, the two goal maps are quite similar. Nevertheless, there are several goals and connections that are unique to each group. Unique of PSM: *to repay debt* → *hassle-free*, *being free of debt* → *hassle-free*, *hassle-free* → *being productive*, *for necessities* → *improved life*, *savings accumulation* → *being prepared*, *money management* → *being prepared*, and *being prepared* → *financial independence*. These goal connections signify qualitative emphasis on three themes that are of concerns of PSM, namely debt, utilitarian motives, and precautionary motives. It appears that debts are felt as burdens to PSM resulting in their immediate concerns to repay. This is further highlighted with both *to repay debt* (which is an action goal) and *being free of debt* being directly associated with *hassle-free*.

Regarding the two other themes, the utilitarian motives appear in the direct connections between *for necessities* → *improved life* and *hassle-free* → *being productive*. Particularly in the latter direct connection, it is interesting to see that *hassle-free* is associated with productive capacity. This may signify the next theme, namely precautionary motives. This appears in the direct connections of *money management* → *being prepared*, *savings accumulation* → *being prepared*, and *being prepared* → *financial independence*. Financial preparedness is conceived as both goals to achieve as well as a means to achieve another goal. Thus, all of the three themes that are unique to PSM support our hypothesis in a qualitative sense, that is, PSM is more precautionary vs. prevention focus.

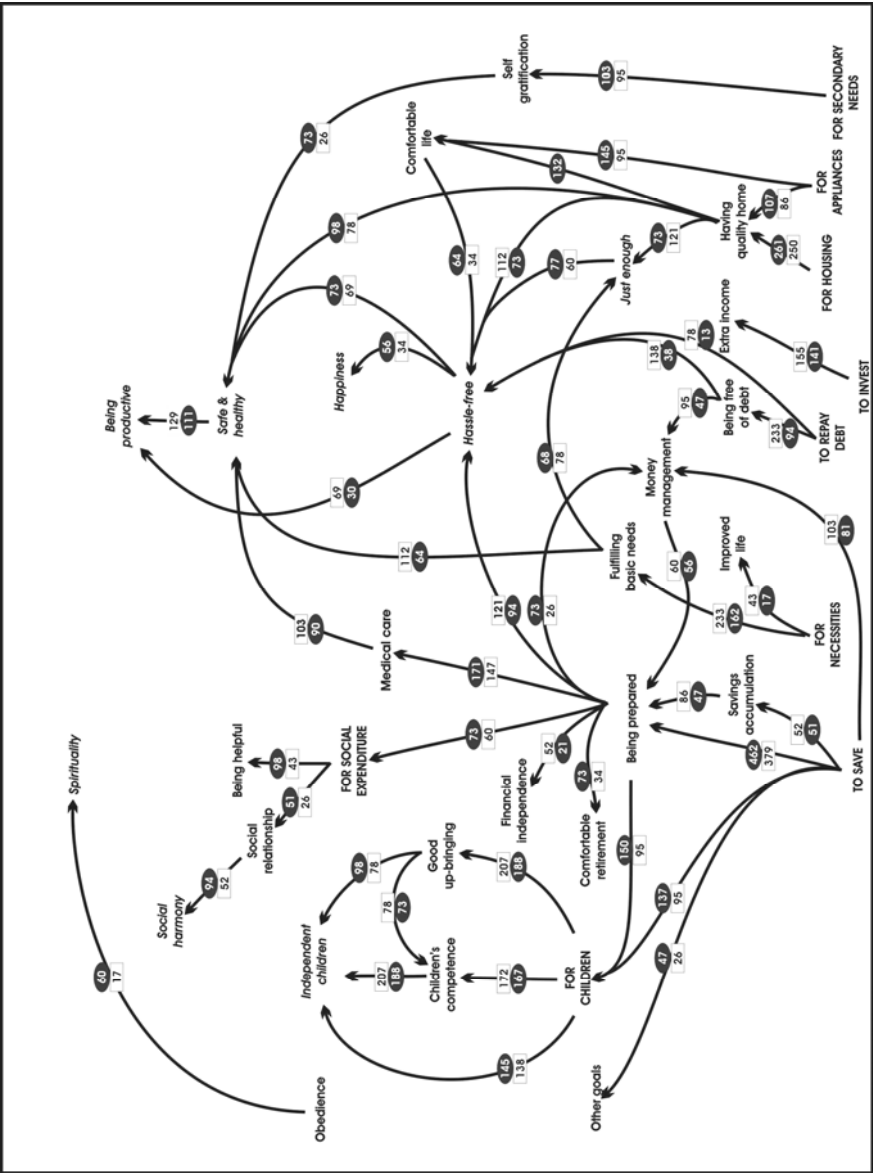


Figure 8.2. The Hierarchical goal map of the optimistic and pessimistic groups

Table 8.5. Chi-square test on the proportion of members that mention goal links

Goal-link	OPM	PSM	Sig. (2-sided)
To repay debt → being free of debts	9.40%	23.38%	0.000
To repay debt → hassle-free	1.28%	7.76%	0.002
Being free of debt → hassle-free	3.85%	13.79%	0.001

There are ten types of goal connections that are unique to OPM. One group of direct connections capture the socialization motives, namely *for social expenditure → being helpful*, *for social expenditure → social relationship*, *social relationship → social harmony*, and *being prepared → for social expenditure*. It is interesting to notice that the precautionary motive such as *being prepared* is associated with socialization, and not with a possible adverse consequence of being financially unprepared. In addition, *being prepared* is also associated with *retirement* and *money management*. This indicates that *precautionary motives* for OPM is not closely related to the minimum expected level of consumption, but rather to the desired level of life above the minimum standard. This is further qualitatively supported by other types of goal connections that are unique to OPM, namely *hassle-free → happiness*, *hassle-free → safe and health*, and *self-gratification → safe and healthy*. To a certain degree hedonic motives appear more strongly among OPM. Two other types that are unique to OPM may further enhance this supposition, namely *to save → other goals* and *obedience → spirituality*.

Towards this end, the hierarchical goal map supports the hypothesis that optimism is associated lesser with precautionary motives and more with spending motives. Even precautionary motive for OPM is associated with achievement of improved standard of life rather than with prevention of undesired consequences. OPM also appears to entertain more hedonic motives. In comparison, the goal systems of PSM appear to be dominated by precautionary motives, utilitarian motives, and an avoidance orientation.

The statistical significance of differences between OPM and PSM in the proportion that mentions certain types of goal links are examined. This test is important due to the fact that a line may appear on both of the goal maps, but they are statistically different in terms of the proportion of the group members who mention it. Chi-square analysis is applied to identify these statistical differences. The results are summarized in Table 8.5. As it is apparent from the table, the two groups are significantly different in terms of the importance of debt-related goals. PSM is significantly higher than OPM on *to repay debt → being free of debts* (23.28% to 9.40%), *to repay debt → hassle-free* (7.76% to 1.28%), and *being free of debt → hassle-free* (13.79% to 3.85%). This provides further support to our hypothesis that consumer confidence influences the formation of generic goal sys-

tems. The next analysis will examine differences in the structural properties of generic goal systems.

8.4.3. Structural properties of the generic goal systems

Two of the structural properties of a hierarchical goal map is chosen, namely the centrality and the instrumentality of goals. Centrality captures the importance of a goal, relative to all other goals in the hierarchical goal system (Bagozzi, Bergami & Leone, 2003). It is computed as a ratio between *ins* and *outs* to a total number of direct connections. Instrumentality represents how important a goal is, in relation to achieving overall goals within the goal system. It is computed as a ratio of *outs* to the total number of direct connections. The summary of results is presented in Table 8.6.

In general, goals systems of OPM and PSM are quite different to each other. The centrality and instrumentality level of approximately 50% of goals are markedly different. For example, 18 goals are relatively different in terms of the rank of centrality. *To repay debt* is the 18th most central goal to PSM, whereas for OPM it is in the 37th rank. Similar differences occur for debt- and financial-related goals, namely *being free of debt* (7th compared to 22nd), and *financial independence* (26th compared to 38th). Utilitarian goals are also more prominent to PSM. The table shows that *improved life* is more central to PSM, where it sits at the 19th rank compared to the 32nd rank for OPM. In comparison, satisfying secondary needs, including social life, is more central to the OPM. For example, *for appliances* is more central to OPM (16th compared to 22nd for PSM), *for social expenditure* (21st vs. 35th), *comfortable life* (6th vs. 15th), *self-gratification* (12th vs. 22nd), *social relationship* (30th vs. 36th), *being helpful* (26th vs. 39th), and *obedience* (19th vs. 29th). These patterns may explain why *happiness* is more central to OPM than PSM, with the 20th rank versus the 30th rank, respectively.

The pattern is repeated in terms of the instrumentality of goals. Paying off the debts are goals that is conceived to contribute to the achievement of higher goals, such as *hassle-free*. Thus, *to repay debt* is more prominent for PSM than OPM (6th vs. 18th). The same applies for *being free of debt* (the 10th vs. the 22nd). Motives related to social life are also less instrumental to PSM. For example, *for social expenditure* is on the 26th of the table for PSM, whereas for OPM it is on the 14th. *Comfortable life* and *self-gratification* are also more instrumental to OPM than PSM, with the 8th vs. 17th and the 12th vs. the 22nd, respectively.

Overall, properties of the hierarchical goal map provide observations that indicate significant differences between optimistic and pessimistic people. Debt-related goals and precautionary motives are both more central and more instrumental to the pessimistic group. In contrast, spending related goals are more central and more instrumental to the optimistic group.

Table 8.6. Rank-order of Centrality and Instrumentality

Goal	Centrality		Instrumentality	
	OPM	PSM	OPM	PSM
For appliances	16	21	6	9
To repay debt	37	18	18	6
For secondary needs	35	38	19	24
For social expenditure	21	35	14	26
Increasing expenditure	41	41	35	40
Improved life	32	19	31	20
Retirement	28	33	28	33
Extra income	18	13	21	15
Comfortable life	6	15	8	17
Being free of debt	22	7	22	10
Good up-bringing	10	16	15	19
Independent children	15	11	26	18
Self-gratification	12	22	12	22
Social relationship	30	36	27	31
Being helpful	26	39	25	37
Happiness	20	30	33	38
Being productive	27	24	37	28
Recognition	39	32	38	34
Self-realization	25	25	34	27
Financial independence	38	26	36	32
Family harmony	40	31	43	35
Obedience	19	29	23	29
Social harmony	33	40	39	43

8.5. Discussion

Differences in the generic goal systems between optimistic and pessimistic people have been analyzed. Several patterns of differences emerged. Optimistic participants exhibit goal systems that are different from the generic goal systems of the pessimistic participants, in terms of hedonic orientation in spending and pro-social goals. In comparison, pessimistic participants exhibit distinctive orientation in terms of utilitarian and precautionary attitudes in the generic goal system. In addition, between-group comparisons with economic psychological and demographic variables revealed interesting findings. Whereas the optimistic participants mentioned higher level of income and involvement in saving and spending, they are significantly lower than the pessimistic group in terms of satisfaction with their household financial situation, ability to satisfy needs, and educa-

tion. Nevertheless, the two groups are not different in terms of attitudes and age. Each aspect of these findings will be discussed with regard to the conceptual model of the relationship between consumer confidence and generic goal systems (Figure 8.1).

The hedonic orientation in spending and pro-social goals is observed in the generic goal system of the optimistic participant. It manifests within the functional interrelationship of several goals, most notably in the pro-social motives. The proportion of OPM is significantly higher than PSM in mentioning *for social expenditure, being helpful, social relationship, social harmony*. These goals are also significantly higher on the index of centrality and instrumentality. It is hedonic in the sense that the goals do not serve the economically utilitarian interests. In addition, hedonic orientation also manifests an association with *hassle-free* → *happiness* and *self-gratification* → *safe and healthy*. These functional relationships are significantly less emphasized in the generic goal systems of the pessimistic participants. Rather, this group relates the state of *hassle-free* as being productive. Overall, these patterns appear to justify the conclusion of hedonic orientation in an optimistic sentiment.

This conclusion can be explained in terms of the self-regulatory mechanism of consumer confidence. Optimism and openness to change are found to be associated with promotion-focused self-regulation (Grant & Higgins, 2003; Liberman, Idson, Camacho & Higgins, 1999). Thus the optimistic participants appear to behave under the promotion-focus of self-regulation. Further, promotion-focused individuals are more likely found to overweigh hedonic and attractive attributes on product evaluations (Chernev, 2004a), to prefer immediate gratifications of needs (Sengupta & Zhou, 2007; Dholakia, Gopinath, Bagozzi & Natarajan, 2006), to desire more of comfort (Werth & Foerster, 2007), and to prefer enriched as opposed to impoverished options (Zhang & Mittal, 2007). Goal systems characterized by hedonic and pro-social goals are likely to represent promotion-focused self-regulatory mechanisms associated with optimism.

The most noticeable difference between goal systems of the optimistic and pessimistic participant concerns the debt-related goals. Over all, the parameter of analysis, i.e., content, organization, and structural properties, debt-related goals are more significantly present in the generic goal systems of the pessimistic participants. Whilst at the level of action goal, repaying debt is not unique to the pessimistic, the direct connection between repaying debt and *hassle-free* (a focal goal), and between *being free of debts* and *hassle-free* do not appear at the generic goal systems of the optimistic participants. This indicates a higher sensitivity of pessimistic sentiments to the emotional consequences of being under debt. Debts are known to cause distress (Brown, Taylor & Price, 2005; Walker, 1996). There-

fore the self-regulatory mechanisms of pessimistic people are inclined to avoid debts, thus signifying a prevention-focused self-regulation. On the other hand, the relative absence of debt-repayment goals from the generic goal system of the optimistic participant can be explained by empirical findings asserting that optimistic financial expectations impact positively on the willingness to take and sustain debts (Brown, Garino, Taylor & Price, 2005).

Another category of goals distinguishing the pessimistic group concerns utilitarian motives. This is particularly evident in the direct connection between goals of the generic goal system. For example, pessimistic goal systems associate *hassle-free* with *being productive*, or *for necessity* with *improved life*, that are relatively absent from the generic goal system of the optimistic group. This can be explained from the perspective of regulatory focus theory. Pessimism on the economic and financial situation is associated with risks and uncertainties (Van Oest & Franses, 2008), and therefore with a prevention-focused self-regulatory mechanism. As in the explanation of debt-related goals, the individual becomes more sensitive to the negative consequences of the failure of behaviour. Self-regulatory mechanism is focused on, using the signal detection theoretical framework (McNicol, 1972; Crowe & Higgins, 1997), maximizing *correct rejection* and minimizing *error of commission*. Within this context, self-regulatory mechanisms of the pessimistic participants are focused on controlling against hedonic temptations in favour of utilitarian motives. A non-utilitarian endeavour would likely be perceived by people on a pessimistic sentiment as approaching conditions of *error of commission*, and therefore should be avoided. This notion is supported by other studies that found people under self-regulatory prevention to be more attracted to utilitarian and reliability-related attributes, as compared to hedonic and performance-related attributes (Chernev, 2004a).

Finally, pessimistic people demonstrated higher accessibility toward precautionary motives. This tendency appears in the direct connections between goals, such as *money management* → *being prepared*, *savings accumulation* → *being prepared*. *Being prepared* was also conceived as a means for achieving *financial independence*. Although precautionary motives also appear on the optimistic goal system, the implied meaning appeared to be different. Whereas for the pessimistic people, precautionary motives are directed against the prevention of failure of satisfying minimum levels of consumption, for the optimistic group it appears to be directed at supporting higher level of consumption. In this group, *being prepared* is connected directly to *for social expenditure*.

The accessibility of precautionary motives to both groups might justify the general motive of stable level of consumption, as commonly assumed in the economic theories. However, the different interpretation of precautionary motives

reflects more of the consequence of self-regulatory mechanisms. A positive outlook towards the economic and financial situation will likely entail a promotion focus. With a stable level of consumption in the background, individuals under promotion-focused self-regulation will be more sensitive to the positive consequence of success in self-regulation. In this case, they become more easily preoccupied with images of increasing their standard of consumption. In contrast, pessimistic individuals would be more sensitive with failure of self-regulation. In this case, the negative consequences concern declines in the standard of consumption. Therefore precautionary motives in the traditional sense, which is related to security, become more accessible to the pessimistic individuals.

Towards this end, we may conclude that there is a consistent pattern that distinguishes optimism from pessimism, with regard to generic goal systems. However, an objection might be raised in terms that the observed differences might be caused by other independent variables. We tested four types of psychological variables, namely involvement in saving, involvement in spending, attitudes toward saving and attitudes toward debt. With regard to the attitude variables, we find that there is no significant difference between the two groups. Therefore we can reject the objection on the ground that the influence of attitude is equal to both groups. With regards to the involvement variable, an unexpected finding is obtained. To get an objective valid ground, it is expected that pessimism would be higher on involvement in saving, whereas optimism will be higher on involvement in spending. However, the results show that optimistic participants are higher on both measures. This may imply that consumer involvement is relatively independent from consumer confidence. In addition, the optimistic group is less satisfied with regards to household financial situations and perceived lower ability to satisfy needs. On the contrary, they have a higher education and income level than the pessimistic group. This unexpected reversal pattern cannot be explained with the existing data. Considering that education and income level are robust factors in economic behaviour, this unexpected finding merit further examination.

8.6. Chapter summary

This study has demonstrated that consumer confidence is selectively associated with generic goal systems. The generic goal system of the optimistic individual represents an orientation towards hedonic and pro-social goals. In contrast, the generic goal system of the pessimistic individual represents an orientation towards utilitarian and debt-repayment motives. Similarities in the generic goal systems of the two groups signify the importance of the motives of stable levels of consumption in the long-term. Hence, this finding supports the notion

that a consumer confidence index carries substantive information regarding the psychological variables that determine economic behaviour at the individual and aggregate level. In this case, this study demonstrates generic goal systems as the informational content of the consumer confidence indexes.



Chapter 9

Summary, evaluation, and future research



The generic level of behaviour concerns the allocation of consumer resources into different ways of consumption and saving. Therefore behaviours at this level can strategically influence the welfare of the individual. Interestingly, the generic level of consumer behaviour is largely overlooked. There is a void in empirical examination regarding how individuals are making decisions at this level and how each chosen act is related to the broader meanings (goals) of the decision maker. In the present dissertation, an in-depth exploration is performed to identify the types of goals and how they are organized in a generic goal system. Further, it is examined how competing goals are functionally interrelated in the generic goal system. Finally, generic goal systems are applied to identify differences between gender, and the informational content of the indexes of consumer confidence.

This chapter summarizes and evaluates previous chapters of this dissertation, and suggests directions for future research in the generic level of decision making. The plan of this chapter is as follows. Section 9.1 provides summaries of all previous chapters of this thesis, with emphasis on the results of the studies. In Section 9.2 the major aspects of the present study is evaluated. The particular question addressed concerns the aspects of the present study that are instrumental in gaining insight into goal systems at the generic level of consumer decision making. Finally, in Section 9.3. some suggestions for further studies are elaborated.

9.1. Summary

This dissertation consists of nine chapters. The first three chapters introduce the generic level of consumer behaviour, the relevant studies, and the approach of this study. Built on this, a generic goal-laddering procedure is proposed

and data of pilot studies are examined in Chapter 4. The proposed procedure consists of three parts, namely the scenario of a generic decision-making situation, the elicitation of action and focal goals, as well as the laddering elicitation of super-ordinate goals. Response patterns and content analysis demonstrated satisfactory results. The size of the hypothetical windfall income, which is set up to represent the average monthly income of the participants, elicits four types of consumer behaviours at the generic level, namely saving, spending, investing, and repaying debt. Content analysis revealed 44 types of goals which represent the balance between saving and spending goals, and between concrete and abstract goals. Analysis to the response-rate reveals that the three levels of goal-laddering questions elicit super-ordinate goals exhaustively. In addition, analysis of the pattern of responses indicate some influence of education and income level on the quantity of responses of the respondents, which are as expected. Thus, the content and response pattern analysis show that the proposed generic goal-laddering procedure is appropriate for wider studies into goal systems at the generic level of consumer decision making.

The hierarchical structure of goals elicited in a generic level of consumer behaviour is examined in Chapter 5. The most obvious observation of the goal map is that generic goals are highly organized. Every goal is connected with other goals through one and other pathways. Nevertheless, clusters of goals are highly visible, such as education for children, social life, harmonious family, and precautionary motives. Six structural properties of the generic goal system were identified, namely abstractness, prestige, centrality, instrumentality, equifinality, and multifinality. The position of a goal relative to the overall goals of the generic goal system can be distinguished by its relevant properties. For example, an index of abstractness can be used to identify the function of a goal to the other goals, in the sense of whether it serves more as a means for achieving other goals, or as a destination of the goal pursuit. Finally, the chapter reports the results of examination into the nomological validity of the generic goal system. Using consumer confidence as a parameter, the analysis reveals that both goals and direct linkages (henceforth links) between goals explain significant variance of consumer confidence. Moreover, the inclusion of links to the model containing goals increased the significantly explained the variance. Conversely, the inclusion of goals to the model containing links increased the explained variance significantly. Based on the results of data analysis, this chapter concludes that goals elicited at the generic level of consumer decision making is highly organized and capable of predicting significant variance of a related variable. We label the organized generic goals as the generic goal system.

In Chapter 6, the action goals, identified in the previous two chapters are categorized either as saving or spending, and separate implication matrixes and

goal maps are developed. Both of the two goal maps demonstrate high integration, especially with regards to the saving goal system. Interestingly, the saving goal system also includes some spending goals, even at the sub-ordinate level. Saving-related goals are integrated into spending goal systems at the higher level. This raises interpretations that *saving* goals and *spending* goals are functionally interrelated, at least partially. The combination of *saving goal systems* and *spending goal systems* explain significantly more variance of the dependent variables than saving and spending goal systems separately. The hierarchical multiple regression analysis demonstrates that *spending goal systems* significantly increase the explanatory power of *saving goal systems* on the dependent variable. However, *saving goal systems* do not increase the explanatory power of *spending goal systems* on the dependent variable. This may support the notion that saving is a postponed consumption.

In Chapter 7, differences between women and men in economic behaviour are examined in terms of differences in their generic goal systems. Although extensive studies have been conducted addressing the issue, the study reported in this chapter may represent the first examination of an intervening variable of economic behaviour. Differences between the genders were examined in terms of types of goals that were mentioned, features of hierarchical goal map, inter-connection between goals, and properties of the hierarchical goal map. Chi-square analysis revealed significant differences in the proportion of men and women in mentioning several generic goals. The proportion of women who mentioned social motives (i.e., *social harmony*, and *being helpful*), motives of life-standard (i.e., *hassle-free*, *other goals*, *medical care*), and financial motives (i.e., *financial independence*, *being prepared*, *to save*) was significantly higher than the proportion of men. In comparison, there was a significantly higher proportion of men mentioning *for necessities*. The relative position of these goals and its related connections are confirmed in the other features of generic goal systems, such as the centrality and the instrumentality indexes. In general, data analysis suggests that utilitarian goals are more central to men, whereas pro-social goals and self-gratification are more central to women. The fact that all respondents were individuals with a career perspective suggests that a modern concept of gender role may determine the observed patterns.

The examination into the informational content of the indexes of consumer confidence is reported in Chapter 8. Based on the self-regulatory mechanisms of optimism and pessimism, we argue that the confidence captured in the indexes of consumer confidence represents the cognitive-motivational contents. To prove this point, the generic goals system elicited from individuals, identified as optimistic on the consumer confidence scale, are compared with the generic goal system of the pessimistic group. The results demonstrate significant differences in

terms of content of goals, linkage between goals, and properties of the generic goal system. In general, the optimistic goal system consist of spending- goals, whereas the pessimistic goal systems are more inclined towards precautionary motives. Based on this, the chapter concludes that levels of consumer confidence activate goals differently. As such, consumer confidence would predict different orientations of economic behaviour.

In sum, the findings reported in this dissertation provide various contributions to the existing consumer behaviour literature, especially with regards to consumer decision making at the generic level. First, they demonstrate that goals that become salient at a generic level can be elicited using a simple procedure of generic goal laddering, based on a short scenario of windfall income. These findings imply that examinations into goal systems at the generic level can be conducted using the proposed generic goal-laddering procedure, and that different types of consumer resources can be studied using similar structures of generic goal-laddering procedures. Second, goals elicited at a generic level of consumer decision-making are highly organized in the sense that different goals at the different levels of abstractness are interconnected. These findings imply that a generic goal system provides a unitary framework for choice between categories of economic activities, or decision-making regarding combinations of economic activities. Third, saving and spending goals are functionally interdependent in consumer decision making at the generic level. The inclusion of spending goal systems increase the explanatory power of saving goal systems on some of the dependent variables, but saving goal systems do not significantly increase the explanatory power of spending goal systems. These findings confirm the importance of willingness factors in saving (Katona, 1975), and imply that future research into savings and saving behaviours, both at the individual and aggregate levels, need to take into account factors that determine consumers' spending. Fourth, there are certain aspects of the generic goal system of men and women that are significantly different. More specifically, utilitarian values and precautionary motives are more prevalent in the generic goal systems of men, whereas pro-social and non-utilitarian orientations are more pronounced in women. These findings suggest that future research should further thoroughly examine the impact of gender roles on consumer behaviours at the generic level. Finally, significant differences in the generic goal system were also found between people of optimistic sentiment, as compared to the pessimistic groups. The generic goal system of optimistic individuals demonstrate significantly higher inclinations towards hedonic and pro-social orientations. In contrast, the generic goal systems of pessimistic individuals are characterized by stronger orientations toward utilitarian and debt-repayment motives. These findings suggest that the index of consumer sentiment is associated with the generic goal system, thus functioning

as the informational content. The implication of these findings, and hence the direction of future research is directed upon the notion that the indexes of consumer confidence provides proxies for understanding consumer goals of which further determines aggregate savings and spending.

9.2. Evaluation

In contrast to the beliefs that research into the generic level is superfluous (e.g., Van Veldhoven & Groenland, 1993), this dissertation demonstrates that a new understanding of consumers can be built from research into the generic goal systems elicited at a generic level of consumer decision making. To back-up this claim, the contribution of this research will be evaluated in terms of the answers towards the research questions. In addition, a generalized model of generic goal systems in the context of consumer behaviour will be developed.

9.2.1. Evaluation to the research questions

This research dissertation was set to examine three research problems, namely the appropriate method, the organization, and the factors that determine generic goals. With regard to the first problem, a brief literature review in Chapter 3 pointed at the laddering technique was thus applied as an appropriate method for eliciting consumer goals. Subsequently the generic goal laddering procedure was developed on the bases of George Kelly's personal construct theory, the original version of laddering methods by D.N. Hinkle, laddering procedures for eliciting means-end chains of consumer behaviour (Olson & Reynolds, 2001), and the laddering procedure for eliciting super-ordinate goals (Pieters, Baumgartner & Allen, 1995; Bagozzi, Bergami & Leone, 2003). The distinctive features of the proposed generic goal-laddering include: (i) the task-stimulus, (ii) action goals as the bases of the laddering processes, (iii) a self-administered laddering procedure. Appropriateness of this procedure has been evaluated extensively in Section 3.8. In this section we would like to evaluate the application of the generic goal laddering procedure in a broader context.

The task stimulus that was used for this study is windfall money, or in other words a medium-sized amount of money relative to regular income. No specific reference was associated to the money, such as who gives it or from what source the money comes from. Considering the specific mental accounting processes (Henderson & Peterson, 1992), this treatment is expected to provide the researcher with the most general of response data. Whereas specific mental accounting is avoided in this study, for some other purposes it might be desirable. For example, researchers might be interested in examining the non-fungibility of money (Thaler, 1999) in the context of budgeting, by systematically comparing

generic goal systems over different types of windfall money. In that case the task stimulus should capture the element of the desired situation. One principle that arises from this study is that the amount of money should reflect the size that is realistic to the subject.

Another possibility is to develop task stimuli representing other types of scarce consumer resources, such as time, effort, social power, and life expectations. The hypothetical situation used in this study worked satisfactorily. A similar approach can be applied for situations involving non-monetary resources. With regard to our life as a resource, a hypothetical post-disaster situation might be used. For example, we might ask respondents to imagine: "Imagine that you were miraculously saved from a fatal accident which killed several people you know personally. Think of three of your most important activities." Generic goal laddering of such situations might reveal the general meaning of life which constitutes goals of different levels of abstractness.

In the next part of the procedure is a question designed to elicit focal goals. For each of the mentioned action goals, respondents are asked to specify what they would like to achieve by committing the particular act. Specifying focal goals is essential both in terms of the goal setting framework (Bagozzi & Dholakia, 1999) and the laddering procedure for super-ordinate goals (Pieters, Baumgartner & Allen, 1995; Bagozzi, Bergami & Leone, 2003). Therefore similar questions need to be integrated in the procedure of generic goal laddering in other contexts.

Data collection for this study is carried out by sending questionnaires to the respondents. This implies that the laddering procedure is administered by the respondents themselves. Other researchers have used the same type of data collecting, i.e., Cannova, Rattazi and Webley (2005). Nevertheless, this method might become too complex for certain types of respondents. Analysis of response patterns in Chapter 3 revealed the significance of the level of educational background in the laddering responses. An alternative way to overcome this problem is by conducting laddering interviews, both face-to-face or through such mediums as the telephone or the internet.

With regards to content and organization of generic goals, content analysis revealed 44 types of generic goals of different level of abstractness. At the most concrete level, action goals are clearly distinguishable in terms of saving and spending. Saving goals consists of actions such as saving, investing, repaying debt, and buying insurance. In comparison, spending goals consists of activities such as spending or decorating the house, buying appliances, buying for necessities, for children, and for social purposes. These goals clearly represent consumer behaviour at the modal level (Antonides & Van Raaij, 1998).

The higher level of goals shows a functional interrelationship between spending and saving goals. Goals that are commonly associated with saving motives are such as *being prepared* (i.e., precautionary motive), wealth accumulation, and earning extra income (i.e., investment motive). These goals function as a means for achieving focal goals that are associated with spending or consumption. For example, *being prepared* leads to the ability to afford medical costs, children's education, and self-gratification (e.g., entertainment and recreation). These goals, along with other goals such as an assured retirement, having a comfortable life, and being free of debt, might be called as focal goals (Taylor et al., 2006).

The most abstract goals concern values. In this study, respondents mentioned several values such as happiness, harmonious family, spirituality, and social harmony. There are several abstract goals which might be otherwise considered as more concrete goals at different economic and social backgrounds. Included in these unique responses is the ability to perform religious rituals, being safe and healthy, being productive, and having children that are economically independent. This finding demonstrates that judgment regarding what constitutes values, or in technical terms concerns the level of goal abstractness, should be based on the economic and social contexts. For example, there was a major earthquake destroying thousand of houses in an area where most of the respondents lived, approximately six months before the data collection. It can be understood that many of the respondents considered having a safe house and good health as ultimate goals.

Generic goals as briefly illustrated above are highly organized. At the representation level of 62%, every single goal is connected to other goals. Moreover, goals can be distinguished quite clearly in terms of properties of hierarchical structure, namely abstractness, prestige, centrality, instrumentality, equifinality, and multifinality. Functional relationships constitute an integral part of the generic goal organization. Competing goals are integrated in the goal system. The explanatory power of a goal on a criterion goal is increased by the number of competing goals. For example, the explanatory power of saving goals on the variable of consumer involvement in saving significantly increases with the addition of spending goals in the model. This finding suggests the importance of comprehensive perspectives in understanding consumer behaviour.

A critical issue regarding the contents of the generic goal system concerns data processing of the responses. One critical step in this regard concerns the coding of responses into small sets of goals. This process is laden with subjective judgment. A coding manual with a detailed description of each category can be used, such as in this study. However, categories of goals must reflect more of the

perspective of respondent than that of the researcher. To better guarantee that the perspective of the respondent is reflected in the data, random selection of a portion of laddering protocol can be drawn for inspection. A coding manual should be based on the data-driven categories from this sample manual. Coding must be done by independent raters with sufficient understanding of the goal categories. Inter-rater agreement should address the reliability of the goal coding.

Finally, individual differences in generic goal systems were examined in relations to gender and consumer confidence. Our analysis shows that differences in generic goal systems between men and women, and between the optimistic and pessimistic participants, are statistically significant and descriptively meaningful. However, several limitations are important to highlight. First of all, participants of this study were not drawn to represent a general population such as the Indonesian people. Rather, the sampling is based more on the convenience of data collection. Therefore the generalization, especially with regards to gender and consumer confidence, is limited to the relatively uniform social-economic backgrounds of the participants. In addition, analysis regarding the impact of optimism and pessimism on generic goal systems is based on the consumer confidence survey instrument. Alternatively, research might be conducted by experimental methods, which will provide the experimenter with a control environment and specific behaviours to observe. Optimism and pessimism can be induced on the participants, for example by the priming of certain stimuli. Generic goal systems can be elicited using the generic goal-laddering procedure, under different conditions of priming.

9.2.2. A model of consumer behaviour at the generic level

A fundamental question concerns how the generic goal system explain economic behaviour. Chapters 7 and 8 of this dissertation provide a unique opportunity for constructing an economic psychological model of economic behaviour of the consumers. These chapters examine two widely acknowledged factors of economic behaviours, namely gender and consumer confidence. Both chapters demonstrate significant differences in generic goal systems, both statistically and descriptively. Moreover, each of them offers unique contribution to economic psychological and consumer behaviour research in the sense that generic goal systems are considered as the intervening variables of the relationship between gender and consumer confidence in one hand, and economic behaviours (see Figure 7.1 and 8.1, respectively) on the other. In this section the two models will be integrated to explain economic behaviour, see Figure 9.1.

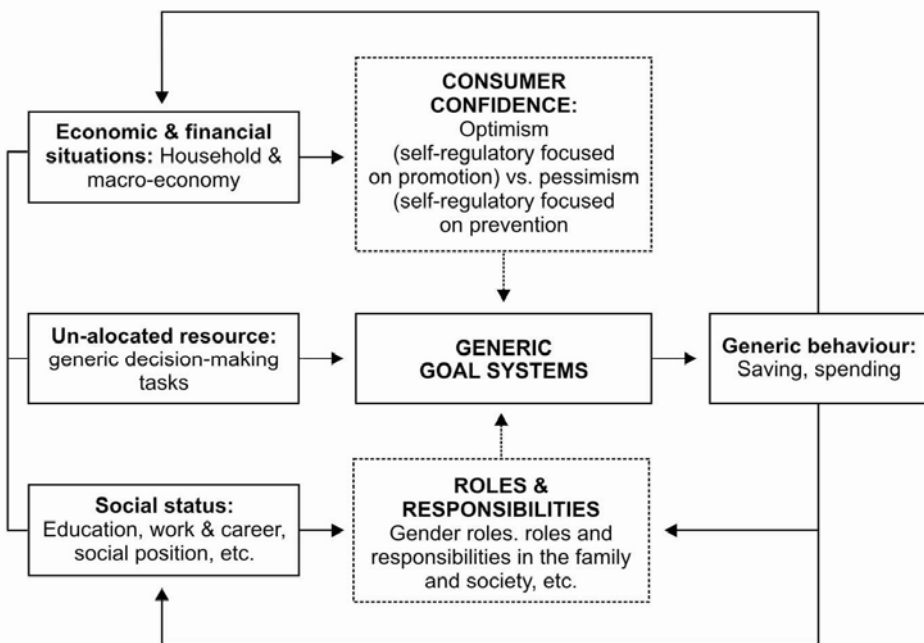


Figure 9.1.Generic goal systems as mediating factors in economic behaviour.

The presence of a consumer resource that is not yet allocated triggers a generic decision-making task. Individuals weigh different options of utilizing the resource. In most cases it concerns windfall income, although other types of consumer resources are just equally possible. Following the assumption of goals and goal systems as cognitive-motivational constructs (Austin & Vancouver, 1996; Kruglanski et al., 2002), a decision-making task brings into salience the generic goal systems. What goals and functional relationships between goals constitute the goal systems are influenced by situational factors, ie., consumer confidence, and personal factors, i.e., roles and responsibilities.

An important personal factor concerns gender roles. It refers to the socially defined roles of which captures what behaviours, attitudes, and interests that are appropriate for the gender groups (e.g., Burn, 1996). For example, in traditional societies roles for women and for men are clearly segregated, of which women are mostly confined to domestic roles and men for economic roles. Such roles and responsibility segregations obviously determine goals that one has at the generic level of consumer behaviour. However, the participants of this study hardly represented traditional societies, especially with regard to the fact that they are drawn from the population of career individuals. This appears to explain the relative differences between the goal systems of men and women, in which

utilitarian goals are more central to men, whereas pro-social goals and self-gratification are more central to women. Thus, besides gender role, other socially defined positions such as roles and responsibilities in the family, society, and workplace may determine the content and functional relationship of goals at the generic level.

Another factor that determines generic goal systems is consumer confidence. Chapter 8 shows that there are significant differences between the generic goal systems of optimistic and pessimistic individuals. The relationship between consumer confidence and generic goal systems is explained in terms of regulatory focus theory (Higgins, 1997, 1998). Optimism is assumed to lead individuals to adopt self-regulatory mechanisms focused on promotion, whereas pessimism is associated with the focus on prevention. Further, promotion- and prevention-focused self-regulations induce different types of goals and functional relationships between goals, as demonstrated by the data in Chapter 8. The generic goal systems of optimistic individuals significantly consists more of spending-related goals, whereas the pessimistic goal systems are more inclined towards precautionary motives.

Thus, consumer confidence and socially defined roles and responsibilities indirectly determine economic behaviours, through generic goal systems. Two streams of feedback loops are assumed in the model. Saving and spending may directly influence consumer confidence and the roles and responsibilities. The cybernetic control mechanisms of self-regulation, Figure 1.1, compare saving and spending behaviour of the individual with what goals are implied by the roles and responsibilities. Discrepancies that may arise determine what generic goals are salient within certain generic decision-making tasks. Over a longer period, economic behaviours determine the economic and social achievements of the individuals. Investing in education, for example, will improve work, careers, and social status of individuals. In turn, changes in social achievement will be followed by changes in social roles and responsibilities. With regard to consumer confidence, the saving and spending of individuals determine the aggregate consumption and supply of capital to the economy (Katona, 1975). Therefore they determine the level of output of the economy as a whole. The outlook of macro-economy will eventually determine consumer confidence, through sentiment which regards aspects such as employment, inflation, and returns of investment.

9.3. Suggestions for future research

This study has several limitations that can serve as possible directions for future research in consumer behaviour at the level of generic decision making. More specifically, this section will discuss limitations and directions for further

studies on four aspects, namely the context of the study, the method of goal elicitation, the construct of the generic goal system, and the context of application.

First, the findings are restricted by the research context, namely generic decision making concerning medium-sized windfall money among government employees in Indonesia. The results of this study demonstrate that generic goal systems are well organized, which may indicate that overall, it captures the meaning systems of the individual. One line of future studies can be directed at investigating the generic goal systems in relation to consumer meaning systems. Extension of research context, namely the types of consumer resources and the characteristics of sample will particularly serve this purpose.

Consumers form or activate goals upon encountering a behaviour situation (Bagozzi & Dholakia, 1999). Consequently, different types of goal systems will be formed under different sizes, types, and contexts of consumer resources. This study uses medium-sized money, relative to regular income. Goal systems in the context of relatively small- and large-sized money, or even in terms of negative income, are important to study. Results of such studies might be useful to marketing and to understand the macroeconomic impact of income shocks. Annual bonuses are handed over to employees at almost the same time. Dynamics in the financial market imply that many households experience sudden fortunes, or otherwise unexpected losses. How transitory income at these levels, of different sources and in different contexts, may influence the generic goal systems of the segment of the population would be important to understand.

This study has been limited to consumer resources in terms of money. Other types of consumer resources merit examination, namely time, effort, social power, and consumer life. Time consumption is an important aspect of consumer behaviour. It concerns consumption in various contexts, such as consumption of time in airports, hotels, shopping malls (considering the majority of visitors are there just for window shopping). Understanding generic goal systems that become active or can be activated in such situations would help create better designs of the facilities, or better in terms of marketing objectives. Other type of time consumption concerns retirement. Transition from regular time-use from involvement in work to freedom of time-use may be difficult. The difficulties may result in behavioural disorders, such as post-power syndromes or even decrease in health. Studies on generic goal systems in the context of retirement would provide a major help in designing programs for transition to retirement.

Patients diagnosed with terminal illness, survivors of a disaster, and individuals released from a prison, especially at middle- and senior-aged persons, often experience the question of their meaning of life. In the context of termi-

nally ill patients, the lifespan is vividly scarce. In the case of disaster survivors and ex-prisoners changes in their meaning of life occur. In each of these contexts, a redefinition of the purpose of life is an urgent matter. The generic goal laddering procedure, with an extra care on the ethical practices, would assist both the individual and the counsellor.

Social power is often overlooked from the definition of consumer resources. However, decisions regarding the desired ways of using social power can be analyzed in terms of the generic level of consumer behaviour. A unique aspect concerns the perspective on decision making regarding the use of social power. It can be viewed from the perspective of the actor, such as the politicians and the parents. From the viewpoint of the constituent, it concerns the voters prior to a general election, and the teenager at certain points of their lifecycle within the household. Bagozzi & Dabholkar (2000) study goal systems of the constituents in the context of pre-general election. More understanding of what is important to both the agent and the constituent of such social settings and social events is certainly needed.

Another limitation of this study concerns the sample. This study involves participants who are working for the Indonesian government. As such, they have life-time security in terms of income. Similar studies with different work-related backgrounds may reveal different content and organization of generic goals. More specifically, studies conducted with lower and higher income earners, and with people working on different financial arrangements might reveal different types of generic goal systems. Culture might also be important in this case. Thus, varying studies into different cultural backgrounds would enrich the understanding of consumer generic goal systems. Comparative studies might be conducted with different ethnic groups within a country, or between countries.

The second limitation is related with the procedure of the generic goal elicitation. In this study, self-administered laddering processes through questionnaires were administered. Alternatively, the procedure can be administered through direct interviews, face-to-face or through telephone, or through computer-based laddering procedures. How different ways of data collection affect the way participants respond is not yet known. However, given the observed differences in other research contexts, this is an important issue that merits an empirical investigation in the future.

Another aspect of limitation of this study concerns data processing and data analysis. Data processing transforms the raw data into categories, and from data categories into goal links. Data processing is quite cumbersome and prone to subjective mistakes. Developing an implication matrix also requires a lot of manual work as well as efforts of combining several programs, text, spreadsheet

and computational processing computer programs. Similar labour processes are required for every statistical test. A specifically dedicated computer program would certainly help the wider application of generic goal-laddering procedure.

The third limitation and therefore the third research direction in the future concerns the constructs of generic goal systems. This study mainly explores generic goal systems at the aggregate level. A similar approach characterised by other studies using the goal laddering method (Pieters, Baumgartner & Allen, 1995; Bagozzi, Bergami & Leone, 2003; Canova, Rattazzi & Webley, 2005; Taylor et al., 2006). Although this account provides an informative picture of the overall cognitive-motivational structure of a generic goal system, the position of the individual generic goal system is not obvious. The lack of methodology for identifying the position of the individual goal system in the aggregate goal map has led to severe criticism. According to K.G. Grunert and S.C. Grunert (1995), a hierarchical means-end structure of a goal is neither cognitive nor motivational, because it lacks of reference to individual goals. We suggest an alternative approach by developing a standard generic goal system for specific generic situations (e.g., types of windfalls, terminally ill patients, divorce, disaster, prison release, retirement). The interpretation of individual cases can be referred to this standard goal system. This is similar to the practices in psychometrics. Norms are developed as a reference for the assessment of individual cases. Based on this, an interpretation of the individual goal system can be made and used, for example in the context of counselling.

Finally, the limited concern of this dissertation is on a truly hypothetical situation of the windfall income. The application of the knowledge on generic goal systems will certainly be improved if the study had been carried out in realistic contexts. We can identify two settings in which the understanding of generic goal systems is urgently needed, namely post-disaster rehabilitation and reconstruction programs, and pre-retirement programs. The first setting concerns the best way to use post-disaster rehabilitation and reconstruction aids, for the best interest of the survivors. However, most people surviving from major disaster are in a state of mental shock and in needs of redefining their life. In combination with other methods such as focused-group discussion, the generic goal laddering procedure administered by the aid agency would assist the people and the agency itself in clarifying what are most important to the survivors. A similar reasoning applies to pre-retirement programs conducted by major companies.

9.4. Closing remarks

I embarked upon this research by means of curiosity and, to be sincerely honest; with such great perplexity, especially in recognition of how an important aspect of consumer behaviour has been largely overlooked in economic psychological and consumer research. I end up with the understanding that there are generic goals that are highly organized and well-connected with other independently verified variables of consumer behaviour. With all the limitations of this study, challenges for future studies and calls for contribution in the future look to be vibrant and rewarding.



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APPENDIX A

The questionnaire

Yogyakarta, 1 Januari 2007

Yth. Orang Tua /Wali Murid

Setiap orang dan setiap rumah tangga memiliki berbagai tujuan yang ingin diraih. Bagaimana keterkaitan antara satu tujuan dengan yang lainnya? Tujuan apa saja yang dianggap lebih penting dari yang lain? Apakah ada faktor-faktor psikologis, ekonomis, dan situasional yang mempengaruhinya?

Angket ini dirancang untuk menggali jawaban atas pertanyaan-pertanyaan di atas. Mohon kiranya Bapak/Ibu bersedia untuk mengisinya **dengan lengkap**.

Waktu yang diperlukan untuk mengerjakan angket ini kurang lebih 1 jam. Hanya **salah satu** dari pasangan suami-istri yang perlu mengerjakan angket ini.

Angket ini bukanlah sebuah alat tes. Oleh karena itu tidak ada jawaban yang benar atau salah, atau jawaban yang baik atau buruk. Mohon dijawab dengan apa adanya. Seluruh informasi dari angket ini akan akan dijaga kerahasiaannya. Jawaban-jawaban Bapak/Ibu akan digunakan semata-mata untuk kepentingan ilmiah.

Sebagai tambahan informasi, angket ini merupakan bagian dari penelitian disertasi untuk meraih gelar doktor di bidang Psikologi Ekonomi dari **Universiteit van Tilburg**, Belanda. Sekiranya dikehendaki, saya bersedia mengirimkan naskah publikasi umum penelitian ini kepada Bapak/Ibu. Bila demikian, mohon Bapak/Ibu mengisi alamat pengiriman pada halaman terakhir angket ini. Hasil tersebut bisa saya kirimkan setelah disertasi dinyatakan lulus oleh komite penguji, yakni kira-kira pada akhir tahun 2007.

Sebelum dan sesudahnya saya ucapkan terima kasih atas partisipasi Bapak/Ibu.

Hormat saya,

Rahmat Hidayat, S.Psi., M.Sc.

(Kandidat doktor pada Universiteit van Tilburg, Belanda;

Dosen di Fakultas Psikologi Universitas Gadjah Mada)

Pertama-tama, kami memerlukan informasi umum tentang diri Anda:

Tahun kelahiran : 19__

Jenis kelamin : ☐ Laki-laki ☐ Perempuan

(1) Jumlah anak : ☐ 1 ☐ 2 ☐ 3 ☐ Lebih dari 3

Usia anak termuda : _____ th/bln.

Usia anak tertua : _____ th.

(2) Siapakah yang lebih berperan dalam pengelolaan keuangan di rumah tangga Anda?

☐ Saya ☐ Suami / Istri saya

(3) Siapakah yang memberikan penghasilan lebih besar untuk keluarga?

☐ Saya ☐ Suami / Istri saya ☐ Penghasilan kami sama

BAGIAN I

Berilah tanda silang ☒ pada jawaban yang paling sesuai dengan diri Anda.

- (1) Menurut Anda, bagaimana situasi perekonomian Indonesia selama 12 bulan terakhir?
- ☐ A Menjadi jauh lebih baik
☐ B Menjadi sedikit lebih baik
☐ C Tidak ada perubahan
☐ D Menjadi sedikit lebih buruk
☐ E Menjadi jauh lebih buruk
☐ F Tidak tahu
- (2) Menurut Anda, bagaimana perkembangan ekonomi Indonesia selama 12 bulan ke depan?
- ☐ A Akan menjadi jauh lebih baik
☐ B Akan menjadi sedikit lebih baik
☐ C Tidak akan ada perubahan
☐ D Akan menjadi sedikit lebih buruk
☐ E Akan menjadi jauh lebih buruk
☐ F Tidak tahu
- (3) Bagaimanakah situasi keuangan keluarga Anda saat ini dibandingkan 12 bulan yang lalu?
- ☐ A Menjadi jauh lebih baik
☐ B Menjadi sedikit lebih baik
☐ C Tidak ada perubahan
☐ D Menjadi sedikit lebih buruk
☐ E Menjadi jauh lebih buruk
☐ F Tidak tahu
- (4) Bagaimana kira-kira situasi keuangan keluarga Anda dalam 12 bulan ke depan?
- ☐ A Akan menjadi jauh lebih baik
☐ B Akan menjadi sedikit lebih baik
☐ C Tidak akan ada perubahan
☐ D Akan menjadi sedikit lebih buruk
☐ E Akan menjadi jauh lebih buruk
☐ F Tidak tahu
- (5) Dibandingkan apa yang ada sekarang, bagaimana prakiraan Anda tentang harga-harga selama 12 bulan ke depan?
- ☐ A Harga-harga akan semakin cepat peningkatannya
☐ B Harga-harga akan tetap meningkat seperti yang sudah-sudah
☐ C Harga-harga akan meningkat, tapi tak secepat yang sudah-sudah
☐ D Harga-harga tidak akan berubah
☐ E Harga-harga akan turun
☐ F Tidak tahu
- (6) Bagaimanakah situasi keuangan keluarga Anda saat ini?
- ☐ A Kami dalam belitan hutang
☐ B Kami terpaksa mengkonsumsi simpanan yang ada
☐ C Sekedar cukup memenuhi semua kebutuhan
☐ D Kami memiliki tabungan sekedarnya
☐ E Kami memiliki tabungan dalam jumlah yang lumayan besar
☐ F Tidak tahu
- (7) Menurut Anda, apakah ini saat yang tepat atau tidak untuk membeli barang-barang seperti furniture, mesin cuci, kulkas, dll?
- ☐ A Waktu yang tepat
☐ B Biasa saja
☐ C Waktu yang tidak tepat
☐ D Tidak tahu

- (8) Menurut perkiraan Anda, apakah dalam 12 bulan ke depan Anda akan mampu menyisihkan sebagian penghasilan untuk menabung?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(Ya, tentu saja)	(Ya, mungkin)	(Mungkin tidak)	(Pasti tidak)	(TIDAK TAHU)

- (9) Dengan mempertimbangkan situasi perekonomian saat ini, Apakah menurut Anda ini merupakan saat yang tepat untuk menabung?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(Ya, tentu saja)	(Ya, mungkin)	(Mungkin tidak)	(Pasti tidak)	(TIDAK TAHU)

BAGIAN II

Bayangkanlah bahwa di luar pendapatan rutin yang biasa Anda terima, saat ini Anda memperoleh uang **tambahan tak terduga** sebesar **Rp. 1.500.000,-** (satu juta lima ratus ribu rupiah).

Apa yang ingin Anda lakukan dengan uang tambahan tak terduga ini?

- [1] Pikirkanlah situasi keuangan Anda saat ini, dan tuliskan **3 aktivitas** yang **paling ingin** Anda lakukan dengan uang tambahan tak terduga ini.

- [2] Jelaskan secara singkat, **tujuan, hasil, atau manfaat** apakah yang ingin Anda raih melalui masing-masing aktivitas tersebut?

Aktivitas	Tujuan
<div>1</div> <div></div> <p>(prioritas tertinggi)</p>	<div>1</div> <div>Tuliskan kembali TUJUAN ini di halaman 4.</div>
<div>2</div> <div></div> <p>(prioritas kedua)</p>	<div>2</div> <div>Tuliskan kembali TUJUAN ini di halaman 6.</div>
<div>3</div> <div></div> <p>(prioritas ketiga)</p>	<div>3</div> <div>Tuliskan kembali TUJUAN ini di halaman 8.</div>

Mohon ditulis sekali lagi **TUJUAN AKTIVITAS 1** di tempat yang disediakan, kemudian berturut-turut ikutilah petunjuk **Bagian A** dan **Bagian B**

Aktivitas

1



Tujuan

1

(Tulis ulang dari **halaman 3**)

A

Mengapa tujuan ini penting bagi Anda?

Sebutkan paling banyak 3 alasan.

Tulis di kotak 1 – 3.



Alasan 1

1



Alasan 2

2



Alasan 3

3

Lanjutkan ke instruksi B>>>

B

Sekarang kerjakan dengan urutan menyamping.

Lakukanlah dengan urutan sebagai berikut:

- (i) Di Kotak 4, tuliskanlah mengapa alasan di Kotak 1 penting bagi Anda?
- (ii) Lanjutkanlah ke Kotak 5. Mengapa alasan di Kotak 4 penting bagi Anda?
- (iii) Pindahlah ke Kotak 6 dan Kotak 7 dengan cara yang sama dengan langkah (i) dan (ii).
- (iv) Terakhir, lanjutkanlah ke Kotak 8 dan Kotak 9 dengan cara yang sama dengan langkah (i) dan (ii).

Mengapa ALASAN 1 penting bagi Anda? 4	Mengapa alasan di kotak 4 penting bagi Anda? 5
Mengapa ALASAN 2 penting bagi Anda? 6	Mengapa alasan di kotak 6 penting bagi Anda? 7
Mengapa ALASAN 3 penting bagi Anda? 8	Mengapa alasan di kotak 8 penting bagi Anda? 9

Mohon ditulis sekali lagi **TUJUAN AKTIVITAS 2** di tempat yang disediakan, kemudian berturut-turut ikutilah petunjuk **Bagian A** dan **Bagian B**

Aktivitas

2



Tujuan

2

(Tulis ulang dari **halaman 3**)

A

Mengapa tujuan ini penting bagi Anda?

Sebutkan paling banyak 3 alasan.

Tulis di kotak 1 – 3.



Alasan 1

1



Alasan 2

2



Alasan 3

3

Lanjutkan ke instruksi B>>>

B

Sekarang kerjakan dengan urutan menyamping.

Lakukanlah dengan urutan sebagai berikut:

- (i) Di Kotak 4, tuliskanlah mengapa alasan di Kotak 1 penting bagi Anda?
- (ii) Lanjutkanlah ke Kotak 5. Mengapa alasan di Kotak 4 penting bagi Anda?
- (iii) Pindahlah ke Kotak 6 dan Kotak 7 dengan cara yang sama dengan langkah (i) dan (ii).
- (iv) Terakhir, lanjutkanlah ke Kotak 8 dan Kotak 9 dengan cara yang sama dengan langkah (i) dan (ii).

Mengapa ALASAN 1 penting bagi Anda?

4

Mengapa alasan di kotak 4 penting bagi Anda?

5

Mengapa ALASAN 2 penting bagi Anda?

6

Mengapa alasan di kotak 6 penting bagi Anda?

7

Mengapa ALASAN 3 penting bagi Anda?

8

Mengapa alasan di kotak 8 penting bagi Anda?

9

Mohon ditulis sekali lagi **TUJUAN AKTIVITAS 3** di tempat yang disediakan, kemudian berturut-turut ikutilah petunjuk **Bagian A** dan **Bagian B**

Aktivitas

3



Tujuan

3

(Tulis ulang dari **halaman 3**)

A

Mengapa tujuan ini penting bagi Anda?

Sebutkan paling banyak 3 alasan.

Tulis di kotak 1 – 3.



Alasan 1

1



Alasan 2

2



Alasan 3

3

Lanjutkan ke instruksi B>>>

B

Sekarang kerjakan dengan urutan menyamping.

Lakukanlah dengan urutan sebagai berikut:

- (i) Di Kotak 4, tuliskanlah mengapa alasan di Kotak 1 penting bagi Anda?
- (ii) Lanjutkanlah ke Kotak 5. Mengapa alasan di Kotak 4 penting bagi Anda?
- (iii) Pindahlah ke Kotak 6 dan Kotak 7 dengan cara yang sama dengan langkah (i) dan (ii).
- (iv) Terakhir, lanjutkanlah ke Kotak 8 dan Kotak 9 dengan cara yang sama dengan langkah (i) dan (ii).

Mengapa ALASAN 1 penting bagi Anda?

4

Mengapa alasan di kotak 4 penting bagi Anda?

5

Mengapa ALASAN 2 penting bagi Anda?

6

Mengapa alasan di kotak 6 penting bagi Anda?

7

Mengapa ALASAN 3 penting bagi Anda?

8

Mengapa alasan di kotak 8 penting bagi Anda?

9

BAGIAN III

Petunjuk:

Pada bagian ini Anda diminta untuk memberikan pendapat mengenai tujuan dalam ekonomi rumah tangga.

Berilah tanda silang ☒ pada angka yang sesuai, untuk menunjukkan seberapa **penting**, **bermanfaat**, **relevan**, dan **mendasar** setiap tujuan tersebut bagi Anda.

Memiliki simpanan yang cukup untuk menghadapi kebutuhan tak terduga, misalnya anggota keluarga yang sakit								
TIDAK PENTING	1	2	3	4	5	6	7	PENTING
TIDAK BERMANFAAT	1	2	3	4	5	6	7	BERMANFAAT BAGI SAYA
TIDAK RELEVAN	1	2	3	4	5	6	7	RELEVAN
KEBUTUHAN TAMBAHAN	1	2	3	4	5	6	7	KEBUTUHAN DASAR

Memiliki simpanan yang cukup untuk menghadapi masa pensiun								
TIDAK PENTING	1	2	3	4	5	6	7	PENTING
TIDAK BERMANFAAT	1	2	3	4	5	6	7	BERMANFAAT BAGI SAYA
TIDAK RELEVAN	1	2	3	4	5	6	7	RELEVAN
KEBUTUHAN TAMBAHAN	1	2	3	4	5	6	7	KEBUTUHAN DASAR

Memiliki simpanan untuk membantu anak atau sanak saudara bila sewaktu-waktu ada yang memerlukan bantuan keuangan								
TIDAK PENTING	1	2	3	4	5	6	7	PENTING
TIDAK BERMANFAAT	1	2	3	4	5	6	7	BERMANFAAT BAGI SAYA
TIDAK RELEVAN	1	2	3	4	5	6	7	RELEVAN
KEBUTUHAN TAMBAHAN	1	2	3	4	5	6	7	KEBUTUHAN DASAR

Menabung untuk keperluan masa depan, misalnya membeli rumah, motor atau mobil, perabotan rumah tangga, naik haji, dll.								
TIDAK PENTING	1	2	3	4	5	6	7	PENTING
TIDAK BERMANFAAT	1	2	3	4	5	6	7	BERMANFAAT BAGI SAYA
TIDAK RELEVAN	1	2	3	4	5	6	7	RELEVAN
KEBUTUHAN TAMBAHAN	1	2	3	4	5	6	7	KEBUTUHAN DASAR

Memiliki sarana hiburan yang bagus, misalnya home theater, televisi layar datar, dll.								
TIDAK PENTING	1	2	3	4	5	6	7	PENTING
TIDAK BERMANFAAT	1	2	3	4	5	6	7	BERMANFAAT BAGI SAYA
TIDAK RELEVAN	1	2	3	4	5	6	7	RELEVAN
KEBUTUHAN TAMBAHAN	1	2	3	4	5	6	7	KEBUTUHAN DASAR

Mengikuti perkembangan mode, misalnya pakaian, dekorasi rumah, asesoris kendaraan, handphone, dll.								
TIDAK PENTING	1	2	3	4	5	6	7	PENTING
TIDAK BERMANFAAT	1	2	3	4	5	6	7	BERMANFAAT BAGI SAYA
TIDAK RELEVAN	1	2	3	4	5	6	7	RELEVAN
KEBUTUHAN TAMBAHAN	1	2	3	4	5	6	7	KEBUTUHAN DASAR

Mengembangkan wawasan dan keterampilan, misalnya dengan berlangganan majalah dan koran, membeli buku, mengikuti kursus								
TIDAK PENTING	1	2	3	4	5	6	7	PENTING
TIDAK BERMANFAAT	1	2	3	4	5	6	7	BERMANFAAT BAGI SAYA
TIDAK RELEVAN	1	2	3	4	5	6	7	RELEVAN
KEBUTUHAN TAMBAHAN	1	2	3	4	5	6	7	KEBUTUHAN DASAR

Menjadi donatur sosial, misalnya menyantuni yatim piatu								
TIDAK PENTING	1	2	3	4	5	6	7	PENTING
TIDAK BERMANFAAT	1	2	3	4	5	6	7	BERMANFAAT BAGI SAYA
TIDAK RELEVAN	1	2	3	4	5	6	7	RELEVAN
KEBUTUHAN TAMBAHAN	1	2	3	4	5	6	7	KEBUTUHAN DASAR

Berikutnya, kami memerlukan informasi tambahan tentang keluarga Anda. Berilah tanda silang ☐ pada kotak di sebelah jawaban yang paling tepat.

(1) Pendidikan tertinggi Anda dan Suami / Istri:

Pendidikan	Anda	Suami / Istri
Sekolah Dasar		
Sekolah Menengah Tingkat Pertama		
Sekolah Menengah Tingkat Atas		
Sarjana (termasuk pendidikan profesi, misal dokter)		
Pasca Sarjana (termasuk S-3 & spesialis profesi)		

(2) Pekerjaan pokok Anda dan Suami / Istri:

Pekerjaan	Anda	Suami / Istri
Pegawai negeri sipil / militer		
Pegawai perusahaan swasta		
Wirausaha		
Professional kerja mandiri, misalnya pengacara, wartawan freelance, seniman, dll.		
Ibu rumah tangga		
Lain-lain		

- (3) Berapakah jumlah total pendapatan keluarga Anda per bulan?

- ☐ Di bawah Rp. 1.000.000
☐ Rp. 1.000.000 s/d. Rp. 2.000.000
☐ Rp. 2.000.000 s/d. Rp. 3.000.000
☐ Rp. 3.000.000 s/d. Rp. 4.000.000
☐ Rp. 4.000.000 s/d. Rp. 5.000.000
☐ Rp. 5.000.000 s/d. Rp. 7.500.000
☐ Rp. 7.500.000 s/d. Rp. 10.000.000
☐ Di atas Rp. 10.000.000.

- (4) Seberapa jauh Anda puas dengan situasi keuangan Anda?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sangat puas	Puas	Biasa saja	Tidak puas	Sangat tidak puas

- (5) Seberapa jauh Anda dapat memenuhi kebutuhan dengan penghasilan ini?

- ☐ Tidak ada masalah, seluruh kebutuhan dapat terpenuhi, bahkan saya bisa menabung atau berinvestasi secara rutin.
☐ Tidak ada masalah, seluruh kebutuhan dapat terpenuhi, dan saya bisa menabung sekalipun tidak secara rutin.
☐ Seluruh kebutuhan dapat terpenuhi, namun sulit untuk bisa menabung.
☐ Saya terpaksa menggunakan simpanan yang ada untuk mencukupi kebutuhan keluarga.
☐ Beberapa kebutuhan terpaksa tidak terpenuhi.
☐ Tidak tahu.

- (6) Ada orang yang ketat menabung; ada yang senantiasa menghabiskan berapa pun yang yang mereka dapatkan. Bagaimana dengan diri Anda?

Dalam skala 1 s/d. 7, nilailah di mana posisi Anda dengan memberi tanda silang ☒

1 berarti "Saya menghabiskan berapa pun uang yang saya dapat", dan

7 berarti "Saya tabung sebanyak mungkin yang saya dapat".

1	2	3	4	5	6	7
HABISKAN BERAPA PUN DIDAPAT						TABUNG SEBANYAK MUNGKIN

Sekali lagi saya ucapkan terimakasih atas partisipasi Anda.

Mohon angket ini diserahkan kepada Bapak/Ibu guru melalui jasa baik putra/putri Anda.



Saya ingin mendapatkan naskah publikasi umum dari penelitian ini.

Mohon dikirimkan melalui alamat pos berikut:

Nama / identitas:

Alamat :

Catatan: Biarkan bagian di atas kosong bila Anda tidak menghendaki naskah publikasi umum penelitian ini.

APPENDIX B

Implication matrix of the complete data

Goal	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 To save		0	12	19	4	3	10	91	4	7	48	422	7	4
2 For insurance	0		0	0	0	0	0	0	0	0	0	3	0	0
3 To invest	0	0		0	0	0	0	1	0	1	1	2	1	7
4 For housing	0	0	2		0	0	0	0	0	0	1	0	0	0
5 For appliances	0	0	0	0		0	0	1	0	0	0	0	0	5
6 To repay debt	0	0	0	0	0		0	0	0	0	1	0	0	1
7 For necessities	0	0	0	0	0	0		4	0	1	3	0	0	16
8 For children	0	0	0	0	2	0	0		0	0	1	2	6	5
9 For secondary needs	0	0	0	0	0	0	0	0		0	0	0	0	0
10 For social expenditure	0	0	0	0	0	0	0	0	0		0	0	0	0
11 Savings accumulation	0	0	2	1	1	0	1	7	0	3		32	2	0
12 Being prepared	0	0	9	8	6	0	5	54	1	32	10		10	6
13 Increasing expenditure	0	0	0	0	0	0	0	0	0	0	0	2		1
14 Improved life	0	0	0	0	0	0	0	0	0	0	0	0	0	
15 Retirement	0	0	0	0	0	0	0	0	0	0	1	2	2	1
16 Other goals	0	0	0	0	0	0	0	1	0	2	0	1	1	3
17 Extra income	0	0	0	0	0	0	1	4	1	1	7	5	8	10
18 Gift to children	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19 Having quality home	0	0	2	0	1	0	0	0	1	0	1	1	0	3
20 Comfortable life	0	0	1	0	0	0	0	0	0	0	0	3	0	1
21 Being free of debt	0	0	0	0	0	0	0	1	0	2	13	0	1	1
22 Fulfilling basic needs	0	0	0	1	1	0	0	2	1	1	3	1	1	6
23 Money management	0	0	1	1	1	0	0	11	0	1	6	26	2	7
24 Medical care	0	0	0	0	0	0	0	0	0	0	0	0	1	0
25 Children's competency	0	0	0	0	0	0	0	0	0	0	0	0	0	1
26 Good up-bringing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27 Independent children	0	0	0	0	0	0	0	3	0	0	0	0	0	1
28 Self-gratification	0	0	0	0	0	0	0	1	0	0	1	0	0	5
29 Social relationship	0	0	0	0	0	0	0	0	0	0	0	1	0	0
30 Being helpful	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 Happiness	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32 Hassle-free	0	0	0	0	0	0	0	0	0	0	0	1	0	3
33 Spirituality	0	0	0	0	0	0	0	0	0	0	0	0	0	1
34 Safe and healthy	0	0	1	0	0	0	0	0	0	0	0	0	0	1
35 Just enough	0	0	0	0	0	0	0	0	0	0	1	0	0	3
36 Productiveness	0	0	0	0	0	0	0	0	0	0	0	0	1	0
37 Recognition	0	0	0	0	0	0	0	0	0	0	0	1	0	0
38 Self-realization	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39 Fcl. independence	0	0	0	0	0	0	0	0	0	0	0	0	0	2
40 Family harmony	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41 Obedience	0	0	0	0	0	0	0	0	0	0	0	0	0	1
42 Prudence	0	0	1	0	0	0	0	0	0	0	3	1	0	2
43 Social worthiness	0	0	0	0	0	0	0	0	0	0	0	0	0	1
44 Social harmony	0	0	0	0	0	0	0	0	0	0	0	0	0	0
In-degrees	0	0	31	30	16	3	17	181	8	51	101	506	43	99

Appendix B. (continued)

Goal	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	20	37	3	2	7	3	0	6	80	7	1	2	8	0	0	0
2	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
3	10	0	108	0	0	2	0	0	9	0	1	0	0	11	1	5
4	0	1	2	3	225	10	0	1	5	0	1	2	0	0	1	0
5	0	0	4	2	76	102	0	2	2	0	4	7	0	21	3	3
6	0	0	0	0	0	0	135	2	9	0	0	0	0	3	0	0
7	0	0	0	0	1	7	2	158	6	1	0	0	0	3	1	0
8	1	0	0	4	0	0	1	10	10	0	110	143	75	1	1	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	83	0	0
10	0	0	0	0	0	0	0	0	1	0	2	0	0	3	27	49
11	3	2	2	0	0	0	0	4	6	1	1	0	0	0	0	1
12	28	4	8	0	2	8	6	20	25	65	7	2	0	2	2	5
13	0	0	0	0	1	0	0	3	6	0	0	1	3	0	0	0
14	1	0	2	0	0	2	0	1	1	0	3	0	0	5	0	0
15		1	3	1	0	2	0	0	3	2	1	0	1	4	1	1
16	0		0	0	1	0	0	0	0	0	1	0	1	1	1	0
17	7	0		0	0	0	1	7	6	0	2	0	0	9	1	1
18	0	0	0		0	0	0	0	0	0	1	2	4	0	0	0
19	0	1	0	4		78	0	3	13	0	0	1	0	3	3	1
20	0	0	3	0	7		0	3	4	0	0	6	0	2	5	3
21	0	0	1	0	0	2		12	33	0	0	1	1	0	0	1
22	2	0	0	0	1	15	2		4	0	7	2	1	4	7	1
23	6	8	11	1	0	1	1	12		1	3	1	0	2	0	0
24	1	0	0	0	0	0	4	0	0		0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	1	0		15	91	0	1	0
26	1	0	0	3	0	0	0	0	1	0	40		45	0	1	0
27	1	0	0	6	0	0	1	0	0	0	2	2		0	0	0
28	3	1	7	0	0	3	0	1	0	0	3	1	0		5	1
29	0	0	0	0	0	2	0	0	0	0	0	0	0	0		2
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	1	0	0	0	0	1	0	0	3	4	0	0	1	1	0	0
33	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
34	0	0	0	0	0	3	0	1	2	1	1	1	0	0	2	0
35	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0
36	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
38	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
41	0	0	1	0	0	0	0	1	3	0	0	0	0	0	1	2
42	2	0	1	0	0	0	0	2	1	0	0	0	1	1	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
In-degrees	87	55	158	26	321	244	154	252	234	82	192	190	232	159	69	76

Appendix B. (continued)

Goal	31	32	33	34	35	36	37	38	39	40	41	42	43	44	Out-degrees
1	0	2	0	1	0	0	1	1	0	0	0	1	0	0	813
2	0	3	0	3	0	0	0	0	0	0	0	0	0	0	12
3	0	1	0	0	0	1	0	0	1	0	0	6	0	0	169
4	4	16	0	2	10	0	0	0	1	0	0	0	0	0	287
5	1	2	0	3	2	0	0	0	0	0	0	1	0	0	241
6	0	29	0	0	0	1	3	0	1	0	0	0	0	0	185
7	0	7	0	18	16	0	1	0	0	0	2	3	0	1	251
8	0	17	0	3	3	1	0	7	3	0	16	0	0	0	422
9	0	0	0	4	0	0	0	2	0	3	0	0	0	0	92
10	3	2	17	0	0	0	1	0	0	0	11	0	1	5	122
11	1	6	0	0	1	1	0	1	3	0	0	4	0	1	87
12	2	48	0	11	19	1	2	1	15	2	2	16	0	1	445
13	0	3	0	0	6	0	0	0	1	0	0	0	0	0	27
14	3	6	0	9	12	1	4	4	0	4	2	2	1	0	63
15	1	3	0	1	11	0	0	0	14	0	0	1	0	0	57
16	0	3	4	0	4	1	0	3	2	0	14	3	0	0	47
17	0	5	0	0	18	0	0	3	4	2	0	3	0	1	107
18	2	0	0	0	0	0	0	0	1	1	1	0	1	0	14
19	11	38	1	40	37	2	7	7	5	9	1	1	2	1	278
20	3	27	0	19	22	19	9	3	3	11	2	13	0	2	171
21	2	39	0	3	10	1	5	1	1	1	5	2	0	0	139
22	11	11	2	39	44	4	4	4	5	7	3	4	0	3	204
23	0	22	1	3	16	1	2	1	0	2	3	18	0	0	172
24	1	5	0	38	5	0	0	1	3	0	0	0	0	1	60
25	1	4	1	1	0	0	2	3	1	1	6	1	5	0	135
26	2	12	0	1	0	0	1	6	2	1	6	3	2	0	127
27	5	7	1	0	1	1	4	9	12	0	10	2	13	0	81
28	9	7	2	23	4	17	7	11	0	9	3	5	0	0	129
29	3	1	0	0	0	1	5	2	0	0	0	0	5	35	57
30	4	3	6	1	0	0	0	0	1	0	11	0	11	21	62
31		13	5	3	1	1	2	4	0	3	1	0	0	2	35
32	23		4	34	14	20	2	13	3	18	5	4	0	5	160
33	3	3		0	0	0	0	1	0	0	5	2	0	0	28
34	8	19	3		10	49	2	5	1	3	0	4	0	0	117
35	13	35	2	15		3	1	4	4	4	8	1	0	3	100
36	6	3	0	0	4		0	9	4	0	1	1	2	0	32
37	3	6	0	1	2	1		10	0	1	1	0	0	5	32
38	10	4	4	2	0	4	7		3	0	2	0	3	1	41
39	4	10	1	0	3	0	1	2		2	2	2	1	0	31
40	3	8	3	2	0	1	0	4	0		0	0	0	2	24
41	4	10	24	0	1	1	2	8	2	0		0	3	2	66
42	0	2	3	3	10	1	0	1	2	0	0		1	2	40
43	1	1	1	1	0	0	1	0	0	0	1	0		1	8
44	5	7	2	0	0	0	1	1	0	0	1	0	3		20
In-degrees	152	450	99	284	286	134	77	132	98	84	125	103	54	95	5790

APPENDIX C

Implication matrix of the saving goals

Goal	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 To save		0	12	19	4	3	10	91	4	7	48	422	7	4
2 For insurance	0		0	0	0	0	0	0	0	0	0	3	0	0
3 To invest	0	0		0	0	0	0	1	0	1	1	2	1	7
4 For housing	0	0	2		0	0	0	0	0	0	1	0	0	0
5 For appliances	0	0	0	0		0	0	1	0	0	0	0	0	5
6 To repay debt	0	0	0	0	0		0	0	0	0	1	0	0	1
7 For necessities	0	0	0	0	0	0		4	0	1	3	0	0	16
8 For children	0	0	0	0	2	0	0		0	0	1	2	6	5
9 For secondary needs	0	0	0	0	0	0	0	0		0	0	0	0	0
10 For social expenditure	0	0	0	0	0	0	0	0	0		0	0	0	0
11 Savings accumulation	0	0	2	1	1	0	1	7	0	3		32	2	0
12 Being prepared	0	0	9	8	6	0	5	54	1	32	10		10	6
13 Increasing expenditure	0	0	0	0	0	0	0	0	0	0	0	2		1
14 Improved life	0	0	0	0	0	0	0	0	0	0	0	0	0	
15 Comfort retirement	0	0	0	0	0	0	0	0	0	0	1	2	2	1
16 Other goals	0	0	0	0	0	0	0	1	0	2	0	1	1	3
17 Extra income	0	0	0	0	0	0	1	4	1	1	7	5	8	10
18 Gift to children	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19 Having quality home	0	0	2	0	1	0	0	0	1	0	1	1	0	3
20 Comfortable life	0	0	1	0	0	0	0	0	0	0	0	3	0	1
21 Being free of debt	0	0	0	0	0	0	0	1	0	2	13	0	1	1
22 Fulfilling basic needs	0	0	0	1	1	0	0	2	1	1	3	1	1	6
23 Money management	0	0	1	1	1	0	0	11	0	1	6	26	2	7
24 Medical care	0	0	0	0	0	0	0	0	0	0	0	0	1	0
25 Children's competency	0	0	0	0	0	0	0	0	0	0	0	0	0	1
26 Good up-bringing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27 Independent children	0	0	0	0	0	0	0	3	0	0	0	0	0	1
28 Self-gratification	0	0	0	0	0	0	0	1	0	0	1	0	0	5
29 Social relationship	0	0	0	0	0	0	0	0	0	0	0	1	0	0
30 Being helpful	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 Happiness	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32 Hassle-free	0	0	0	0	0	0	0	0	0	0	0	1	0	3
33 Spirituality	0	0	0	0	0	0	0	0	0	0	0	0	0	1
34 Safe and healthy	0	0	1	0	0	0	0	0	0	0	0	0	0	1
35 Just enough	0	0	0	0	0	0	0	0	0	0	1	0	0	3
36 Being productive	0	0	0	0	0	0	0	0	0	0	0	0	1	0
37 Recognition	0	0	0	0	0	0	0	0	0	0	0	1	0	0
38 Self-realization	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39 Fcl. Independence	0	0	0	0	0	0	0	0	0	0	0	0	0	2
40 Family harmony	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41 Obedience	0	0	0	0	0	0	0	0	0	0	0	0	0	1
42 Prudence	0	0	1	0	0	0	0	0	0	0	3	1	0	2
43 Social worthiness	0	0	0	0	0	0	0	0	0	0	0	0	0	1
44 Social harmony	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ins-degrees	0	0	31	30	16	3	17	181	8	51	101	506	43	99

Appendix C. (continued)

Goal	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	20	37	3	2	7	3	0	6	80	7	1	2	8	0	0	0
2	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
3	10	0	108	0	0	2	0	0	9	0	1	0	0	11	1	5
4	0	1	2	3	225	10	0	1	5	0	1	2	0	0	1	0
5	0	0	4	2	76	102	0	2	2	0	4	7	0	21	3	3
6	0	0	0	0	0	0	135	2	9	0	0	0	0	3	0	0
7	0	0	0	0	1	7	2	158	6	1	0	0	0	3	1	0
8	1	0	0	4	0	0	1	10	10	0	110	143	75	1	1	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	83	0	0
10	0	0	0	0	0	0	0	0	1	0	2	0	0	3	27	49
11	3	2	2	0	0	0	0	4	6	1	1	0	0	0	0	1
12	28	4	8	0	2	8	6	20	25	65	7	2	0	2	2	5
13	0	0	0	0	1	0	0	3	6	0	0	1	3	0	0	0
14	1	0	2	0	0	2	0	1	1	0	3	0	0	5	0	0
15		1	3	1	0	2	0	0	3	2	1	0	1	4	1	1
16	0		0	0	1	0	0	0	0	0	1	0	1	1	1	0
17	7	0		0	0	0	1	7	6	0	2	0	0	9	1	1
18	0	0	0		0	0	0	0	0	0	1	2	4	0	0	0
19	0	1	0	4		78	0	3	13	0	0	1	0	3	3	1
20	0	0	3	0	7		0	3	4	0	0	6	0	2	5	3
21	0	0	1	0	0	2		12	33	0	0	1	1	0	0	1
22	2	0	0	0	1	15	2		4	0	7	2	1	4	7	1
23	6	8	11	1	0	1	1	12		1	3	1	0	2	0	0
24	1	0	0	0	0	0	4	0	0		0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	1	0		15	91	0	1	0
26	1	0	0	3	0	0	0	0	1	0	40		45	0	1	0
27	1	0	0	6	0	0	1	0	0	0	2	2		0	0	0
28	3	1	7	0	0	3	0	1	0	0	3	1	0		5	1
29	0	0	0	0	0	2	0	0	0	0	0	0	0	0		2
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	1	0	0	0	0	1	0	0	3	4	0	0	1	1	0	0
33	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
34	0	0	0	0	0	3	0	1	2	1	1	1	0	0	2	0
35	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0
36	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
38	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
41	0	0	1	0	0	0	0	1	3	0	0	0	0	0	1	2
42	2	0	1	0	0	0	0	2	1	0	0	0	1	1	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Ins-degrees</i>	<i>87</i>	<i>55</i>	<i>158</i>	<i>26</i>	<i>321</i>	<i>244</i>	<i>154</i>	<i>252</i>	<i>234</i>	<i>82</i>	<i>192</i>	<i>190</i>	<i>232</i>	<i>159</i>	<i>69</i>	<i>76</i>

Appendix C. (continued)

Goal	31	32	33	34	35	36	37	38	39	40	41	42	43	44	Out-degrees
1	0	2	0	1	0	0	1	1	0	0	0	1	0	0	813
2	0	3	0	3	0	0	0	0	0	0	0	0	0	0	12
3	0	1	0	0	0	1	0	0	1	0	0	6	0	0	169
4	4	16	0	2	10	0	0	0	1	0	0	0	0	0	287
5	1	2	0	3	2	0	0	0	0	0	0	1	0	0	241
6	0	29	0	0	0	1	3	0	1	0	0	0	0	0	185
7	0	7	0	18	16	0	1	0	0	0	2	3	0	1	251
8	0	17	0	3	3	1	0	7	3	0	16	0	0	0	422
9	0	0	0	4	0	0	0	2	0	3	0	0	0	0	92
10	3	2	17	0	0	0	1	0	0	0	11	0	1	5	122
11	1	6	0	0	1	1	0	1	3	0	0	4	0	1	87
12	2	48	0	11	19	1	2	1	15	2	2	16	0	1	445
13	0	3	0	0	6	0	0	0	1	0	0	0	0	0	27
14	3	6	0	9	12	1	4	4	0	4	2	2	1	0	63
15	1	3	0	1	11	0	0	0	14	0	0	1	0	0	57
16	0	3	4	0	4	1	0	3	2	0	14	3	0	0	47
17	0	5	0	0	18	0	0	3	4	2	0	3	0	1	107
18	2	0	0	0	0	0	0	0	1	1	1	0	1	0	14
19	11	38	1	40	37	2	7	7	5	9	1	1	2	1	278
20	3	27	0	19	22	19	9	3	3	11	2	13	0	2	171
21	2	39	0	3	10	1	5	1	1	1	5	2	0	0	139
22	11	11	2	39	44	4	4	4	5	7	3	4	0	3	204
23	0	22	1	3	16	1	2	1	0	2	3	18	0	0	172
24	1	5	0	38	5	0	0	1	3	0	0	0	0	1	60
25	1	4	1	1	0	0	2	3	1	1	6	1	5	0	135
26	2	12	0	1	0	0	1	6	2	1	6	3	2	0	127
27	5	7	1	0	1	1	4	9	12	0	10	2	13	0	81
28	9	7	2	23	4	17	7	11	0	9	3	5	0	0	129
29	3	1	0	0	0	1	5	2	0	0	0	0	5	35	57
30	4	3	6	1	0	0	0	0	1	0	11	0	11	21	62
31		13	5	3	1	1	2	4	0	3	1	0	0	2	35
32	23		4	34	14	20	2	13	3	18	5	4	0	5	160
33	3	3		0	0	0	0	1	0	0	5	2	0	0	16
34	8	19	3		10	49	2	5	1	3	0	4	0	0	117
35	13	35	2	15		3	1	4	4	4	8	1	0	3	100
36	6	3	0	0	4		0	9	4	0	1	1	2	0	32
37	3	6	0	1	2	1		10	0	1	1	0	0	5	32
38	10	4	4	2	0	4	7		3	0	2	0	3	1	41
39	4	10	1	0	3	0	1	2		2	2	2	1	0	31
40	3	8	3	2	0	1	0	4	0		0	0	0	2	24
41	4	10	24	0	1	1	2	8	2	0		0	3	2	66
42	0	2	3	3	10	1	0	1	2	0	0		1	2	40
43	1	1	1	1	0	0	1	0	0	0	1	0		1	8
44	5	7	2	0	0	0	1	1	0	0	1	0	3		20
Ins-degrees	152	450	87	284	286	134	77	132	98	84	125	103	54	95	5778

APPENDIX D

Implication matrix of the spending goals

Goal	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 To save		0	0	0	0	0	0	0	0	0	0	0	0	0
2 For insurance	0		0	0	0	0	0	0	0	0	0	0	0	0
3 To invest	0	0		0	0	0	0	0	0	0	1	0	0	0
4 For housing	0	0	1		0	0	0	0	0	0	0	0	0	0
5 For appliances	0	0	3	0		0	0	1	0	0	0	0	0	5
6 To repay debt	0	0	0	0	0		0	0	0	0	0	0	0	0
7 For necessities	0	0	0	0	0	0		4	0	1	2	0	0	16
8 For children	0	0	0	0	2	0	0		0	0	0	0	0	2
9 For secondary needs	0	0	0	0	0	0	0	0		0	0	0	0	0
10 For social expenditure	0	0	0	0	0	0	0	0	0		0	0	0	0
11 Savings accumulation	0	0	0	0	0	0	0	0	0	0		2	1	0
12 Being prepared	0	0	0	0	0	0	0	0	0	0	0		0	0
13 Increasing expenditure	0	0	0	0	0	0	0	0	0	0	0	1		0
14 Improved life	0	0	0	0	0	0	0	0	0	0	0	0	0	
15 Comfort retirement	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16 Other goals	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17 Extra income	0	0	0	0	0	0	1	0	0	0	0	0	1	3
18 Gift to children	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19 Having quality home	0	0	2	0	1	0	0	0	1	0	1	1	0	2
20 Comfortable life	0	0	1	0	0	0	0	0	0	0	0	1	0	1
21 Being free of debt	0	0	0	0	0	0	0	0	0	0	0	0	1	0
22 Fulfilling basic needs	0	0	0	1	1	0	0	2	1	1	1	1	1	5
23 Money management	0	0	0	0	0	0	0	1	0	0	2	3	1	2
24 Medical care	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 Children's competency	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26 Good up-bringing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27 Independent children	0	0	0	0	0	0	0	0	0	0	0	0	0	1
28 Self-gratification	0	0	0	0	0	0	0	0	0	0	1	0	0	5
29 Social relationship	0	0	0	0	0	0	0	0	0	0	0	1	0	0
30 Being helpful	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 Happiness	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32 Hassle-free	0	0	0	0	0	0	0	0	0	0	0	0	0	1
33 Spirituality	0	0	0	0	0	0	0	0	0	0	0	0	0	1
34 Safe and healthy	0	0	1	0	0	0	0	0	0	0	0	0	0	0
35 Just enough	0	0	0	0	0	0	0	0	0	0	0	0	0	1
36 Being productive	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37 Recognition	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38 Self-realization	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39 Fcl. Independence	0	0	0	0	0	0	0	0	0	0	0	0	0	2
40 Family harmony	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41 Obedience	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42 Prudence	0	0	0	0	0	0	0	0	0	0	2	0	0	1
43 Social worthiness	0	0	0	0	0	0	0	0	0	0	0	0	0	1
44 Social harmony	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ins-degrees	0	0	8	1	4	0	1	8	2	2	10	10	5	51

Appendix D. (continued)

Goal	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	1	2	1	221	7	0	0	5	0	0	2	0	0	1	0
5	0	0	4	2	72	96	0	2	1	0	4	7	0	21	3	3
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	1	7	1	153	6	1	0	0	0	3	1	0
8	0	0	0	3	0	0	1	7	3	0	82	114	39	1	1	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	79	0	0
10	0	0	0	0	0	0	0	0	0	0	1	0	0	3	15	34
11	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0
12	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	1	0	0	1	0	1	0	0	3	0	0	2	0	0
15		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0		0	0	0	0	1	0	0	0	0	0	2	0	0
18	0	0	0		0	0	0	0	0	0	1	1	4	0	0	0
19	0	1	0	4		75	0	3	12	0	0	1	0	3	3	1
20	0	0	3	0	7		0	3	4	0	0	6	0	2	5	3
21	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0
22	1	0	0	0	1	13	1		3	0	5	1	1	4	6	1
23	0	0	0	0	0	1	0	1		0	1	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	1	0		14	64	0	1	0
26	0	0	0	3	0	0	0	0	1	0	35		34	0	1	0
27	1	0	0	3	0	0	1	0	0	0	2	1		0	0	0
28	3	1	5	0	0	3	0	0	0	0	2	1	0		2	1
29	0	0	0	0	0	2	0	0	0	0	0	0	0	0		2
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	1	0	0	1	0	0	3	1	1	0	0
33	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
34	0	0	0	0	0	3	0	1	2	0	1	1	0	0	2	0
35	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
41	0	0	1	0	0	0	0	1	0	0	0	0	2	0	1	2
42	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ins-degrees	6	3	22	16	302	213	5	174	41	1	139	153	145	122	48	47

Appendix D. (continued)

Goal	31	32	33	34	35	36	37	38	39	40	41	42	43	44	Out-degrees
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
4	3	14	0	2	3	0	0	0	0	0	0	0	0	0	263
5	1	2	0	3	2	0	0	0	0	0	0	1	0	0	233
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	6	0	17	12	0	1	0	0	0	2	3	0	1	238
8	0	11	0	3	0	1	0	4	1	0	7	0	0	0	282
9	0	0	0	4	0	0	0	0	0	3	0	0	0	0	86
10	2	0	12	0	0	0	0	0	0	0	8	0	0	3	78
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
12	0	2	0	1	0	0	0	0	0	0	0	0	0	1	7
13	0	0	0	0	3	0	0	0	0	0	0	0	0	0	4
14	1	2	0	8	6	1	3	2	0	1	1	0	1	0	34
15	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3
16	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
17	0	0	0	0	3	0	0	1	0	1	0	0	0	0	13
18	1	0	0	0	0	0	0	0	0	1	0	0	1	0	10
19	9	36	1	39	36	2	6	6	5	8	1	1	2	1	264
20	2	25	0	18	19	17	9	2	3	10	2	12	0	2	157
21	0	2	0	0	1	0	0	0	0	0	0	0	0	0	4
22	6	5	2	33	26	3	4	4	1	6	2	1	0	1	145
23	0	2	0	0	2	0	0	0	0	0	1	3	0	0	20
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	1	1	1	1	0	0	2	3	1	1	3	0	3	0	97
26	1	8	0	1	0	0	1	5	1	1	5	3	1	0	101
27	3	3	0	0	1	0	3	5	12	0	5	1	7	0	49
28	7	5	2	20	2	13	7	9	0	8	2	3	0	0	102
29	2	1	0	0	0	1	4	2	0	0	0	0	3	23	41
30	3	2	3	0	0	0	0	0	1	0	8	0	7	9	37
31		6	2	2	1	0	1	4	0	3	1	0	0	2	22
32	11		2	11	6	6	1	6	1	12	3	1	0	2	70
33	2	3		0	0	0	0	1	0	0	5	2	0	0	15
34	5	14	2		6	37	2	4	0	1	0	3	0	0	85
35	7	20	1	9		1	1	1	2	4	5	0	0	2	57
36	4	3	0	0	2		0	8	4	0	1	1	2	0	25
37	2	2	0	1	0	1		9	0	1	1	0	0	2	20
38	6	2	0	1	0	3	4		0	0	2	0	2	1	21
39	0	3	1	0	0	0	0	1		2	1	0	1	0	12
40	3	6	2	2	0	1	0	3	0		0	0	0	1	19
41	3	7	9	0	0	1	0	4	2	0		0	3	2	38
42	0	0	3	2	2	1	0	0	1	0	0		0	0	14
43	0	0	1	1	0	0	1	0	0	0	1	0		1	6
44	4	5	2	0	0	0	1	1	0	0	1	0	3		17
Ins-degrees	89	198	46	179	136	89	51	85	35	63	68	35	36	54	2703

APPENDIX E

Implication matrix of the men's generic goals

Goal	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 To save		0	7	9	3	3	10	74	1	3	31	292	4	4
2 For insurance	0		0	0	0	0	0	0	0	0	0	0	0	0
3 To invest	0	0		0	0	0	0	1	0	0	1	1	1	4
4 For housing	0	0	1		0	0	0	0	0	0	0	0	0	0
5 For appliances	0	0	1	0		0	0	0	0	0	0	0	0	5
6 To repay debt	0	0	0	0	0		0	0	0	0	1	0	0	1
7 For necessities	0	0	0	0	0	0		3	0	0	1	0	0	12
8 For children	0	0	0	0	2	0	0		0	0	1	2	5	4
9 For secondary needs	0	0	0	0	0	0	0	0		0	0	0	0	0
10 For social expenditure	0	0	0	0	0	0	0	0	0		0	0	0	0
11 Savings accumulation	0	0	1	1	1	0	1	5	0	2		18	0	0
12 Being prepared	0	0	7	5	6	0	4	40	1	18	9		8	6
13 Increasing expenditure	0	0	0	0	0	0	0	0	0	0	0	0		1
14 Improved life	0	0	0	0	0	0	0	0	0	0	0	0	0	
15 Comfort retirement	0	0	0	0	0	0	0	0	0	0	1	1	2	0
16 Other goals	0	0	0	0	0	0	0	1	0	2	0	1	0	0
17 Extra income	0	0	0	0	0	0	1	2	1	1	6	4	7	7
18 Gift to children	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19 Having quality home	0	0	1	0	0	0	0	0	1	0	0	0	0	2
20 Comfortable life	0	0	1	0	0	0	0	0	0	0	0	3	0	1
21 Being free of debt	0	0	0	0	0	0	0	1	0	1	8	0	1	1
22 Fulfilling basic needs	0	0	0	1	1	0	0	2	0	1	3	1	1	6
23 Money management	0	0	0	1	0	0	0	6	0	1	4	15	1	7
24 Medical care	0	0	0	0	0	0	0	0	0	0	0	0	1	0
25 Children's competency	0	0	0	0	0	0	0	0	0	0	0	0	0	1
26 Good up-bringing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27 Independent children	0	0	0	0	0	0	0	3	0	0	0	0	0	0
28 Self-gratification	0	0	0	0	0	0	0	1	0	0	1	0	0	3
29 Social relationship	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 Being helpful	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 Happiness	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32 Hassle-free	0	0	0	0	0	0	0	0	0	0	0	1	0	2
33 Spirituality	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34 Safe and healthy	0	0	1	0	0	0	0	0	0	0	0	0	0	0
35 Just enough	0	0	0	0	0	0	0	0	0	0	1	0	0	3
36 Being productive	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37 Recognition	0	0	0	0	0	0	0	0	0	0	0	0	1	0
38 Self-realization	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39 Fcl. Independence	0	0	0	0	0	0	0	0	0	0	0	0	0	2
40 Family harmony	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41 Obedience	0	0	0	0	0	0	0	0	0	0	0	0	0	1
42 Prudence	0	0	1	0	0	0	0	0	0	0	2	1	0	2
43 Social worthiness	0	0	0	0	0	0	0	0	0	0	0	0	0	1
44 Social harmony	0	0	0	0	0	0	0	0	0	0	0	0	0	0
In-degrees	0	0	21	17	13	3	16	139	4	29	70	340	32	76

Appendix E. (continued)

Goal	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	12	14	3	1	7	3	0	6	47	5	0	1	3	0	0	0
2	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0
3	10	0	82	0	0	1	0	0	7	0	1	0	0	9	1	5
4	0	1	2	3	163	9	0	0	5	0	0	2	0	0	1	0
5	0	0	4	2	56	71	0	2	2	0	1	7	0	9	1	0
6	0	0	0	0	0	0	97	2	8	0	0	0	0	3	0	0
7	0	0	0	0	1	7	2	125	6	1	0	0	0	3	1	0
8	1	0	0	3	0	0	1	9	8	0	82	107	58	0	1	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	57	0	0
10	0	0	0	0	0	0	0	0	0	0	2	0	0	0	14	31
11	2	2	1	0	0	0	0	2	4	0	1	0	0	0	0	1
12	16	6	6	0	1	5	5	15	23	40	2	1	0	2	1	1
13	0	0	0	0	1	0	0	2	5	0	0	0	3	0	0	0
14	1	0	1	0	0	2	0	0	1	0	1	0	0	3	0	0
15		0	3	1	0	2	0	0	3	1	1	0	0	4	0	1
16	0		0	0	0	0	0	0	0	0	0	0	1	0	1	0
17	4	0		0	0	0	1	7	4	0	0	0	0	8	0	1
18	0	0	0		0	0	0	0	0	0	1	2	2	0	0	0
19	0	1	0	3		57	0	3	8	0	0	1	0	1	1	1
20	0	0	3	0	2		0	2	4	0	0	4	0	2	3	1
21	0	0	1	0	0	0		8	26	0	0	1	1	0	0	1
22	1	0	0	0	0	12	2		4	0	6	1	1	4	4	1
23	5	2	8	0	0	1	1	9		1	2	1	0	1	0	0
24	0	0	0	0	0	0	2	0	0		0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	1	0		11	61	0	1	0
26	1	0	0	2	0	0	0	0	1	0	35		31	0	1	0
27	1	0	0	2	0	0	1	0	0	0	2	1		0	0	0
28	2	0	3	0	0	1	0	1	0	0	2	0	0		4	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	1	0	0	0	0	0	4	1	1	0	0
33	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
34	0	0	0	0	0	2	0	1	2	1	0	1	0	0	1	0
35	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
41	0	0	1	0	0	0	0	1	0	0	0	0	2	0	1	2
42	2	0	1	0	0	0	0	2	1	0	0	0	1	1	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ins-degrees	58	26	119	17	231	176	113	200	170	49	140	149	165	108	39	46

Appendix E. (continued)

Goal	31	32	33	34	35	36	37	38	39	40	41	42	43	44	Out-degrees
1	0	1	0	1	0	0	1	1	0	0	0	1	0	0	548
2	0	3	0	2	0	0	0	0	0	0	0	0	0	0	11
3	0	1	0	0	0	1	0	0	1	0	0	6	0	0	133
4	4	11	0	2	5	0	0	0	0	0	0	0	0	0	209
5	1	2	0	3	2	0	0	0	0	0	0	0	0	0	169
6	0	20	0	0	0	1	0	0	1	0	0	0	0	0	134
7	0	6	0	15	13	0	1	0	0	0	2	3	0	1	203
8	0	13	0	3	2	1	0	5	2	0	14	0	0	0	324
9	0	0	0	4	0	0	0	0	0	3	0	0	0	0	64
10	2	0	15	0	0	0	1	0	0	0	5	0	1	4	75
11	1	4	0	0	1	1	0	1	3	0	0	3	0	1	57
12	2	28	0	5	10	1	2	1	6	2	1	12	0	1	299
13	0	2	0	0	4	0	0	0	1	0	0	0	0	0	19
14	3	5	0	7	10	1	4	3	0	4	2	2	1	0	51
15	0	2	0	0	7	0	0	0	6	0	0	1	0	0	36
16	0	3	1	0	3	1	0	0	1	0	5	1	0	0	21
17	0	4	0	0	13	0	0	2	4	1	0	2	0	1	81
18	2	0	0	0	0	0	0	0	0	1	1	0	1	0	10
19	5	28	1	30	30	2	4	7	2	7	1	1	2	1	201
20	2	16	0	13	13	11	6	2	3	8	2	9	0	2	113
21	1	25	0	1	9	0	4	1	0	1	5	2	0	0	99
22	8	7	1	30	34	2	3	2	5	6	3	4	0	3	160
23	0	20	0	3	13	1	2	1	0	2	3	15	0	0	126
24	1	3	0	23	3	0	0	1	2	0	0	0	0	0	36
25	1	2	1	1	0	0	1	2	0	0	4	0	4	0	91
26	1	9	0	1	0	0	1	5	1	0	6	2	0	1	98
27	5	2	0	0	1	1	2	6	11	0	7	1	12	0	58
28	4	5	1	19	3	9	4	10	0	8	2	7	0	0	90
29	2	3	0	0	0	0	0	2	0	0	0	0	2	20	29
30	1	2	6	1	0	0	0	0	0	0	6	0	5	13	35
31		8	1	3	1	1	2	3	0	2	1	0	0	1	23
32	19		3	22	10	14	1	10	1	12	4	3	0	3	112
33	0	3		0	0	0	0	1	0	0	5	2	0	0	12
34	6	12	2		9	37	1	4	0	3	0	1	0	0	84
35	10	17	2	10		3	1	3	3	4	6	1	0	2	68
36	3	2	0	0	4		0	7	4	0	1	1	0	0	23
37	2	1	0	1	2	1		8	0	0	1	0	0	3	20
38	6	4	1	2	0	3	5		2	0	1	0	3	1	28
39	2	5	1	0	1	0	0	2		2	2	0	1	0	19
40	3	7	3	2	0	1	0	3	0		0	0	0	1	21
41	4	8	12	0	1	1	2	7	1	0		0	2	1	47
42	0	2	3	2	9	0	0	1	2	0	0		1	1	35
43	1	1	1	1	0	0	0	0	0	0	0	0		1	6
44	3	4	0	0	0	0	1	1	0	0	1	0	2		12
Ins-degrees	105	301	55	207	213	94	49	102	62	66	91	80	37	62	4090

APPENDIX F

Implication matrix of the women's generic goals

Goal	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 To save		0	5	10	1	0	0	17	3	4	17	130	3	0
2 For insurance	0		0	0	0	0	0	0	0	0	0	3	0	0
3 To invest	0	0		0	0	0	0	0	0	1	0	1	0	3
4 For housing	0	0	1		0	0	0	0	0	0	1	0	0	0
5 For appliances	0	0	2	0		0	0	1	0	0	0	0	0	0
6 To repay debt	0	0	0	0	0		0	0	0	0	0	0	0	0
7 For necessities	0	0	0	0	0	0		1	0	1	2	0	0	4
8 For children	0	0	0	0	0	0	0		0	0	0	0	1	1
9 For secondary needs	0	0	0	0	0	0	0	0		0	0	0	0	0
10 For social expenditure	0	0	0	0	0	0	0	0	0		0	0	0	0
11 Savings accumulation	0	0	1	0	0	0	0	2	0	1		14	2	0
12 Being prepared	0	0	2	3	0	0	1	14	0	14	1		2	0
13 Increasing expenditure	0	0	0	0	0	0	0	0	0	0	0	2		0
14 Improved life	0	0	0	0	0	0	0	0	0	0	0	0	0	
15 Comfort retirement	0	0	0	0	0	0	0	0	0	0	0	1	0	1
16 Other goals	0	0	0	0	0	0	0	0	0	0	0	0	1	3
17 Extra income	0	0	0	0	0	0	0	2	0	0	1	1	1	3
18 Gift to children	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19 Having quality home	0	0	1	0	1	0	0	0	0	0	1	1	0	1
20 Comfortable life	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 Being free of debt	0	0	0	0	0	0	0	0	0	1	5	0	0	0
22 Fulfilling basic needs	0	0	0	0	0	0	0	0	1	0	0	0	0	0
23 Money management	0	0	1	0	1	0	0	5	0	0	2	11	1	0
24 Medical care	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 Children's competency	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26 Good up-bringing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27 Independent children	0	0	0	0	0	0	0	0	0	0	0	0	0	1
28 Self-gratification	0	0	0	0	0	0	0	0	0	0	0	0	0	2
29 Social relationship	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 Being helpful	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 Happiness	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32 Hassle-free	0	0	0	0	0	0	0	0	0	0	0	0	0	1
33 Spirituality	0	0	0	0	0	0	0	0	0	0	0	0	0	1
34 Safe and healthy	0	0	0	0	0	0	0	0	0	0	0	0	0	1
35 Just enough	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36 Being productive	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37 Recognition	0	0	0	0	0	0	0	0	0	0	0	1	0	0
38 Self-realization	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39 Fcl. Independence	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40 Family harmony	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41 Obedience	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42 Prudence	0	0	0	0	0	0	0	0	0	0	1	0	0	0
43 Social worthiness	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44 Social harmony	0	0	0	0	0	0	0	0	0	0	0	0	0	0
In-degrees	0	0	13	13	3	0	1	42	4	22	31	165	11	23

Appendix F. (continued)

Goal	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	8	23	0	1	0	0	0	0	33	2	1	1	5	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	26	0	0	1	0	0	2	0	0	0	0	2	0	0
4	0	0	0	0	62	1	0	1	0	0	1	0	0	0	0	0
5	0	0	0	0	20	31	0	0	0	0	3	0	0	12	2	3
6	0	0	0	0	0	0	38	0	1	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	33	0	0	0	0	0	0	0	0
8	0	0	0	1	0	0	0	1	2	0	28	36	17	1	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0
10	0	0	0	0	0	0	0	0	1	0	0	0	0	3	13	18
11	1	0	1	0	0	0	0	2	2	1	0	0	0	0	0	0
12	12	1	2	0	1	3	1	5	2	25	5	1	0	0	1	4
13	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0
14	0	0	1	0	0	0	0	1	0	0	2	0	0	2	0	0
15		1	0	0	0	0	0	0	0	1	0	0	1	0	1	0
16	0		0	0	1	0	0	0	0	0	1	0	0	1	0	0
17	3	0		0	0	0	0	0	2	0	2	0	0	1	1	0
18	0	0	0		0	0	0	0	0	0	0	0	2	0	0	0
19	0	0	0	1		21	0	0	5	0	0	0	0	2	2	0
20	0	0	0	0	5		0	1	0	0	0	2	0	0	2	2
21	0	0	0	0	0	2		4	7	0	0	0	0	0	0	0
22	1	0	0	0	1	3	0		0	0	1	1	0	0	3	0
23	1	6	3	1	0	0	0	3		0	1	0	0	1	0	0
24	1	0	0	0	0	0	2	0	0		0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0		4	30	0	0	0
26	0	0	0	1	0	0	0	0	0	0	5		14	0	0	0
27	0	0	0	4	0	0	0	0	0	0	0	1		0	0	0
28	1	1	4	0	0	2	0	0	0	0	1	1	0		1	1
29	0	0	0	0	0	2	0	0	0	0	0	0	0	0		0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0
35	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
36	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
In-degrees	29	32	39	9	90	68	41	52	58	29	52	48	70	51	30	28

Appendix F. (continued)

Goal	31	32	33	34	35	36	37	38	39	40	41	42	43	44	Out-degrees
1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	265
2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
4	0	5	0	0	5	0	0	0	1	0	0	0	0	0	78
5	0	0	0	0	0	0	0	0	0	0	0	1	0	0	75
6	0	9	0	0	0	0	3	0	0	0	0	0	0	0	51
7	0	1	0	3	3	0	0	0	0	0	0	0	0	0	48
8	0	4	0	0	1	0	0	2	1	0	2	0	0	0	98
9	0	0	0	0	0	0	0	2	0	0	0	0	0	0	28
10	1	2	2	0	0	0	0	0	0	0	6	0	0	1	47
11	0	2	0	0	0	0	0	0	0	0	0	1	0	0	30
12	0	20	0	6	9	0	0	0	9	0	1	4	0	0	149
13	0	1	0	0	2	0	0	0	0	0	0	0	0	0	8
14	0	1	0	2	2	0	0	2	0	0	0	0	0	0	13
15	1	1	0	1	4	0	0	0	8	0	0	0	0	0	21
16	0	0	3	0	1	0	0	3	1	0	9	2	0	0	26
17	0	1	0	0	5	0	0	1	0	1	0	1	0	0	26
18	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4
19	6	10	0	10	7	0	3	0	3	2	0	0	0	0	77
20	1	11	0	6	9	8	3	1	0	3	0	4	0	0	58
21	1	14	0	2	1	1	1	0	1	0	0	0	0	0	40
22	3	4	1	9	10	2	1	2	0	1	0	0	0	0	44
23	0	2	1	0	3	0	0	0	0	0	0	3	0	0	46
24	0	2	0	15	2	0	0	0	1	0	0	0	0	1	24
25	0	2	0	0	0	0	1	1	1	1	2	1	1	0	44
26	1	3	0	0	0	0	0	1	1	1	1	0	1	0	29
27	0	6	0	0	0	0	2	3	1	0	3	1	1	0	23
28	5	2	1	4	1	8	3	2	0	1	1	1	0	0	43
29	1	1	0	0	0	1	2	0	0	0	0	0	3	15	25
30	3	1	0	0	0	0	0	0	1	0	5	0	6	8	27
31		5	4	0	0	0	0	1	0	1	0	0	1	0	12
32	4		1	12	4	6	1	3	2	6	1	1	0	2	45
33	3	0		0	1	0	0	0	0	0	0	0	0	0	5
34	2	7	1		1	12	1	1	1	0	0	3	0	0	33
35	3	18	0	5		0	0	1	1	0	2	0	0	1	32
36	3	1	0	0	0		0	2	0	0	0	0	2	0	9
37	1	5	0	0	0	0		2	0	1	0	0	0	2	12
38	4	0	3	0	0	1	2		1	0	1	0	0	0	13
39	2	5	0	0	2	0	1	0		0	0	2	0	0	12
40	0	1	0	0	0	0	0	1	0		0	0	0	1	3
41	0	2	12	0	0	0	0	1	1	0		0	1	1	19
42	0	0	0	1	1	1	0	0	0	0	0		0	1	5
43	0	0	0	0	0	0	1	0	0	0	1	0		0	2
44	2	3	2	0	0	0	0	0	0	0	0	0	1		8
In-degrees	47	153	31	77	74	40	25	32	36	18	35	25	17	33	1697

APPENDIX G

Implication matrix of the optimistic group

Goal	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 To save		0	7	7	3	0	2	54	3	7	32	269	7	4
2 For insurance	0		0	0	0	0	0	0	0	0	0	0	0	0
3 To invest	0	0		0	0	0	0	0	0	1	0	1	0	3
4 For housing	0	0	0		0	0	0	0	0	0	0	0	0	0
5 For appliances	0	0	2	0		0	0	1	0	0	0	0	0	1
6 To repay debt	0	0	0	0	0		0	0	0	0	0	0	0	0
7 For necessities	0	0	0	0	0	0		3	0	1	1	0	0	6
8 For children	0	0	0	0	0	0	0		0	0	0	0	4	4
9 For secondary needs	0	0	0	0	0	0	0	0		0	0	0	0	0
10 For social expenditure	0	0	0	0	0	0	0	0	0		0	0	0	0
11 Savings accumulation	0	0	2	0	1	0	0	5	0	1		14	1	0
12 Being prepared	0	0	5	3	4	0	4	38	1	19	3		6	4
13 Increasing expenditure	0	0	0	0	0	0	0	0	0	0	0	1		1
14 Improved life	0	0	0	0	0	0	0	0	0	0	0	0	0	
15 Comfort retirement	0	0	0	0	0	0	0	0	0	0	1	1	1	0
16 Other goals	0	0	0	0	0	0	0	0	0	2	0	1	1	2
17 Extra income	0	0	0	0	0	0	1	2	1	0	5	1	6	7
18 Gift to children	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19 Having quality home	0	0	1	0	1	0	0	0	0	0	0	1	0	1
20 Comfortable life	0	0	0	0	0	0	0	0	0	0	0	2	0	1
21 Being free of debt	0	0	0	0	0	0	0	1	0	1	6	0	0	0
22 Fulfilling basic needs	0	0	0	0	0	0	0	1	0	1	2	1	1	1
23 Money management	0	0	0	0	0	0	0	9	0	1	3	14	1	2
24 Medical care	0	0	0	0	0	0	0	0	0	0	0	0	1	0
25 Children's competency	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26 Good up-bringing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27 Independent children	0	0	0	0	0	0	0	0	0	0	0	0	0	1
28 Self-gratification	0	0	0	0	0	0	0	0	0	0	1	0	0	4
29 Social relationship	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 Being helpful	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 Happiness	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32 Hassle-free	0	0	0	0	0	0	0	0	0	0	0	1	0	1
33 Spirituality	0	0	0	0	0	0	0	0	0	0	0	0	0	1
34 Safe and healthy	0	0	1	0	0	0	0	0	0	0	0	0	0	0
35 Just enough	0	0	0	0	0	0	0	0	0	0	1	0	0	2
36 Being productive	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37 Recognition	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38 Self-realization	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39 Fcl. Independence	0	0	0	0	0	0	0	0	0	0	0	0	0	2
40 Family harmony	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41 Obedience	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42 Prudence	0	0	1	0	0	0	0	0	0	0	3	0	0	2
43 Social worthiness	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44 Social harmony	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>In-degrees</i>	0	0	19	10	9	0	7	114	5	34	58	307	29	51

Appendix G. (continued)

Goal	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	10	27	0	1	1	3	0	6	46	2	1	1	0	0	0	0
2	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0
3	10	0	50	0	0	0	0	0	6	0	0	0	0	10	0	4
4	0	0	1	2	144	6	0	0	3	0	1	2	0	0	1	0
5	0	0	4	1	46	65	0	0	1	0	3	4	0	12	1	3
6	0	0	0	0	0	0	53	2	3	0	0	0	0	0	0	0
7	0	0	0	0	1	3	0	78	3	0	0	0	0	3	1	0
8	0	0	0	3	0	0	0	5	4	0	57	88	43	1	1	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	56	0	0
10	0	0	0	0	0	0	0	0	1	0	2	0	0	3	18	31
11	3	2	1	0	0	0	0	3	4	1	0	0	0	0	0	1
12	19	3	6	0	2	7	2	11	18	40	6	2	0	1	1	5
13	0	0	0	0	1	0	0	1	5	0	0	1	3	0	0	0
14	0	0	0	0	0	1	0	1	1	0	0	0	0	4	0	0
15		1	2	0	0	2	0	0	2	2	1	0	1	3	0	1
16	0		0	0	1	0	0	0	0	0	1	0	0	1	1	0
17	2	0		0	0	0	0	2	2	0	0	0	0	4	0	1
18	0	0	0		0	0	0	0	0	0	0	2	2	0	0	0
19	0	1	0	3		49	0	1	8	0	0	0	0	2	3	1
20	0	0	1	0	3		0	2	2	0	0	3	0	2	3	2
21	0	0	0	0	0	0		4	17	0	0	0	1	0	0	1
22	0	0	0	0	0	8	1		4	0	2	2	0	3	5	0
23	3	7	7	1	0	1	1	4		0	3	0	0	2	0	0
24	1	0	0	0	0	0	3	0	0		0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	1	0		7	51	0	1	0
26	1	0	0	2	0	0	0	0	0	0	21		31	0	0	0
27	0	0	0	2	0	0	0	0	0	0	1	1		0	0	0
28	1	0	6	0	0	1	0	0	0	0	1	1	0		4	1
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0		2
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	2	0	0	4	1	1	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	1	0	0	1	1	1	0	0	0	2	0
35	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	2
42	1	0	1	0	0	0	0	2	1	0	0	0	0	1	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>In-degrees</i>	51	41	80	15	199	149	60	126	135	46	101	121	134	109	46	55

Appendix G. (continued)

Goal	31	32	33	34	35	36	37	38	39	40	41	42	43	44	Out-degrees
1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	496
2	0	3	0	3	0	0	0	0	0	0	0	0	0	0	12
3	0	0	0	0	0	0	0	0	1	0	0	3	0	0	89
4	3	11	0	0	4	0	0	0	0	0	0	0	0	0	178
5	1	2	0	3	0	0	0	0	0	0	0	1	0	0	151
6	0	7	0	0	0	1	0	0	1	0	0	0	0	0	67
7	0	4	0	11	10	0	1	0	0	0	1	3	0	1	131
8	0	13	0	0	1	0	0	6	1	0	9	0	0	0	240
9	0	0	0	4	0	0	0	2	0	3	0	0	0	0	65
10	2	2	11	0	0	0	1	0	0	0	10	0	1	4	86
11	0	2	0	0	0	0	0	1	2	0	0	2	0	1	47
12	2	25	0	7	10	1	1	1	5	1	2	9	0	0	274
13	0	2	0	0	4	0	0	0	0	0	0	0	0	0	19
14	1	6	0	4	3	1	2	2	0	1	2	0	0	0	29
15	0	2	0	1	6	0	0	0	10	0	0	0	0	0	37
16	0	1	3	0	2	1	0	2	2	0	12	2	0	0	35
17	0	4	0	0	10	0	0	1	1	0	0	3	0	1	54
18	1	0	0	0	0	0	0	0	1	1	1	0	1	0	10
19	8	21	0	26	20	1	4	3	5	6	1	0	2	1	170
20	2	20	0	14	10	13	4	2	1	6	1	9	0	1	104
21	1	9	0	1	2	1	2	0	0	0	4	1	0	0	52
22	7	6	1	18	19	4	3	2	3	3	1	2	0	1	102
23	0	14	1	1	12	0	1	1	0	1	1	11	0	0	102
24	1	4	0	21	3	0	0	0	1	0	0	0	0	1	36
25	1	3	0	1	0	0	1	1	0	0	4	0	3	0	74
26	2	10	0	1	0	0	0	3	2	1	3	2	2	0	81
27	0	4	1	0	0	0	2	6	5	0	7	1	8	0	39
28	7	5	2	19	3	13	5	7	0	5	1	2	0	0	89
29	3	1	0	0	0	1	3	1	0	0	0	0	2	25	38
30	3	1	4	1	0	0	0	0	1	0	8	0	8	16	45
31		9	4	2	1	1	1	4	0	1	1	0	0	1	25
32	15		3	20	10	8	1	6	2	10	3	1	0	2	91
33	2	2		0	0	0	0	1	0	0	2	2	0	0	10
34	7	8	2		5	30	2	1	0	2	0	3	0	0	67
35	9	20	1	5		1	1	3	3	1	4	1	0	1	54
36	4	3	0	0	2		0	6	0	0	1	0	1	0	17
37	2	3	0	1	0	0		6	0	0	1	0	0	3	16
38	8	2	0	2	0	2	5		1	0	2	0	1	0	24
39	1	8	0	0	0	0	1	2		0	1	0	1	0	17
40	2	3	2	1	0	0	0	0	0		0	0	0	1	9
41	3	6	20	0	1	1	2	5	1	0		0	3	1	48
42	0	0	2	2	7	0	0	1	1	0	0		1	2	28
43	1	1	1	0	0	0	0	0	0	0	1	0		0	4
44	3	5	1	0	0	0	1	1	0	0	1	0	3		15
In-degrees	102	252	59	170	145	80	44	78	50	42	85	59	37	63	3377

APPENDIX H

Implication matrix of the pessimistic group

Goal	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 To save		0	5	4	0	0	4	21	0	0	12	109	0	0
2 For insurance	0		0	0	0	0	0	0	0	0	0	0	0	0
3 To invest	0	0		0	0	0	0	0	0	0	1	1	1	4
4 For housing	0	0	0		0	0	0	0	0	0	0	0	0	0
5 For appliances	0	0	1	0		0	0	0	0	0	0	0	0	4
6 To repay debt	0	0	0	0	0		0	0	0	0	0	0	0	0
7 For necessities	0	0	0	0	0	0		0	0	0	2	0	0	10
8 For children	0	0	0	0	2	0	0		0	0	0	0	2	0
9 For secondary needs	0	0	0	0	0	0	0	0		0	0	0	0	0
10 For social expenditure	0	0	0	0	0	0	0	0	0		0	0	0	0
11 Savings accumulation	0	0	0	0	0	0	1	2	0	1		11	1	0
12 Being prepared	0	0	3	4	2	0	0	11	0	7	4		3	2
13 Increasing expenditure	0	0	0	0	0	0	0	0	0	0	0	1		0
14 Improved life	0	0	0	0	0	0	0	0	0	0	0	0	0	
15 Comfort retirement	0	0	0	0	0	0	0	0	0	0	0	1	0	0
16 Other goals	0	0	0	0	0	0	0	1	0	0	0	0	0	1
17 Extra income	0	0	0	0	0	0	0	2	0	1	2	1	1	3
18 Gift to children	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19 Having quality home	0	0	1	0	0	0	0	0	0	0	0	0	0	1
20 Comfortable life	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 Being free of debt	0	0	0	0	0	0	0	0	0	0	5	0	0	1
22 Fulfilling basic needs	0	0	0	1	0	0	0	1	1	0	1	0	0	5
23 Money management	0	0	1	1	1	0	0	2	0	0	3	9	0	5
24 Medical care	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 Children's competency	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26 Good up-bringing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27 Independent children	0	0	0	0	0	0	0	3	0	0	0	0	0	0
28 Self-gratification	0	0	0	0	0	0	0	1	0	0	0	0	0	1
29 Social relationship	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 Being helpful	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 Happiness	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32 Hassle-free	0	0	0	0	0	0	0	0	0	0	0	0	0	2
33 Spirituality	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34 Safe and healthy	0	0	0	0	0	0	0	0	0	0	0	0	0	1
35 Just enough	0	0	0	0	0	0	0	0	0	0	0	0	0	1
36 Being productive	0	0	0	0	0	0	0	0	0	0	0	0	1	0
37 Recognition	0	0	0	0	0	0	0	0	0	0	0	1	0	0
38 Self-realization	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39 Fcl. Independence	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40 Family harmony	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41 Obedience	0	0	0	0	0	0	0	0	0	0	0	0	0	1
42 Prudence	0	0	0	0	0	0	0	0	0	0	0	1	0	0
43 Social worthiness	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44 Social harmony	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ins	0	0	11	10	5	0	5	44	1	9	30	135	9	42

Appendix H. (continued)

Goal	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	4	7	1	0	6	0	0	0	25	5	0	1	6	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	38	0	0	1	0	0	3	0	0	0	0	1	1	0
4	0	1	0	1	61	2	0	1	1	0	0	0	0	0	0	0
5	0	0	0	1	17	18	0	2	1	0	1	3	0	7	2	0
6	0	0	0	0	0	0	55	0	1	0	0	0	0	3	0	0
7	0	0	0	0	0	4	0	53	3	0	0	0	0	0	0	0
8	1	0	0	1	0	0	1	4	4	0	32	42	24	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8
11	0	0	1	0	0	0	0	1	2	0	1	0	0	0	0	0
12	5	1	2	0	0	1	3	5	3	17	0	0	0	1	1	0
13	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0
14	1	0	2	0	0	1	0	0	0	0	3	0	0	1	0	0
15		0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
16	0		0	0	0	0	0	0	0	0	0	0	1	0	0	0
17	4	0		0	0	0	1	4	2	0	2	0	0	3	1	0
18	0	0	0		0	0	0	0	0	1	0	2	0	0	0	0
19	0	0	0	1		17	0	1	2	0	0	1	0	0	0	0
20	0	0	2	0	3		0	0	1	0	0	0	0	0	1	1
21	0	0	1	0	0	0		5	14	0	0	1	0	0	0	0
22	1	0	0	0	0	5	0		0	3	0	1	1	2	1	
23	2	1	3	0	0	0	0	5		1	0	1	0	0	0	0
24	0	0	0	0	0	0	1	0	0		0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0		3	28	0	0	0
26	0	0	0	1	0	0	0	0	1	0	11		10	0	0	0
27	0	0	0	2	0	0	1	0	0	0	0	1		0	0	0
28	2	1	1	0	0	1	0	1	0	0	2	0	0		0	0
29	0	0	0	0	0	2	0	0	0	0	0	0	0	0		0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
34	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
36	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
41	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
In-degrees	20	11	54	7	87	55	62	84	65	23	57	54	75	35	13	10

Appendix H. (continued)

Goal	31	32	33	34	35	36	37	38	39	40	41	42	43	44	Out-degrees
1	0	2	0	0	0	0	1	0	0	0	0	0	0	0	213
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	1	0	0	0	0	0	2	0	0	54
4	1	4	0	2	4	0	0	0	0	0	0	0	0	0	78
5	0	0	0	0	2	0	0	0	0	0	0	0	0	0	59
6	0	15	0	0	0	0	3	0	0	0	0	0	0	0	77
7	0	1	0	2	3	0	0	0	0	0	1	0	0	0	79
8	0	4	0	0	2	1	0	1	2	0	3	0	0	0	126
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
10	0	0	4	0	0	0	0	0	0	0	0	0	0	0	15
11	1	2	0	0	1	1	0	0	1	0	0	2	0	0	29
12	0	14	0	4	7	0	1	0	9	1	0	6	0	0	117
13	0	0	0	0	1	0	0	0	0	0	0	0	0	0	5
14	2	0	0	5	8	0	2	1	0	3	0	2	0	0	31
15	0	1	0	0	4	0	0	0	1	0	0	1	0	0	10
16	0	2	1	0	2	0	0	1	0	0	1	1	0	0	11
17	0	0	0	0	5	0	0	2	1	1	0	0	0	0	36
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
19	1	15	0	11	14	1	3	4	0	2	0	1	0	0	76
20	1	4	0	4	4	1	2	1	1	2	1	3	0	1	33
21	0	19	0	1	4	0	2	0	1	1	1	0	0	0	56
22	3	2	1	16	11	0	1	2	2	3	2	1	0	0	67
23	0	4	0	2	3	0	0	0	0	1	2	5	0	0	52
24	0	0	0	14	1	0	0	1	1	0	0	0	0	0	18
25	0	0	1	0	0	0	1	1	1	1	2	1	1	0	40
26	0	2	0	0	0	0	1	3	0	0	2	1	0	0	32
27	5	2	0	0	0	1	2	3	5	0	3	1	4	0	33
28	1	2	0	3	0	3	1	1	0	3	2	3	0	0	29
29	0	0	0	0	0	0	0	0	0	0	0	0	1	8	11
30	0	2	1	0	0	0	0	0	0	0	1	0	2	2	8
31		2	0	1	0	0	1	0	0	2	0	0	0	0	6
32	6		0	8	0	11	1	7	0	5	2	2	0	2	48
33	1	1		0	1	0	0	0	0	0	2	0	0	0	6
34	1	6	1		4	17	0	2	0	1	0	1	0	0	35
35	2	9	1	5		2	0	0	1	1	3	0	0	1	27
36	1	0	0	0	2		0	3	4	0	0	0	1	0	13
37	0	3	0	0	1	1		3	0	0	0	0	0	0	10
38	2	2	4	0	0	2	1		2	0	0	0	1	0	14
39	3	2	1	0	2	0	0	0		2	0	1	0	0	11
40	1	3	1	0	0	1	0	3	0		0	0	0	0	10
41	1	3	2	0	0	0	0	3	0	0		0	0	0	13
42	0	2	1	1	2	1	0	0	0	0	0		0	0	9
43	0	0	0	1	0	0	1	0	0	0	0	0		1	3
44	1	2	0	0	0	0	0	0	0	0	0	0	0		3
In-degrees	34	132	19	80	88	44	24	42	32	29	28	34	10	15	1624

Samenvatting



Generieke besluitvorming is een belangrijk onderdeel van consumentengedrag. Het kan een significante invloed hebben op het welzijn van de consument. Binnen dit onderzoek wordt het generieke besluitvormingsproces onderzocht als een aantal doelen die zich manifesteren in het mentale verwerkingssysteem. De specifieke doelen van dit onderzoek zijn: (1) het ontwikkelen van een procedure om de generieke doelen van consumenten na te kunnen gaan, (2) om de organisatie van generieke doelen te herkennen, (3) om te herkennen hoe tegenovergestelde doelen in het mentale systeem van consumenten functioneel georganiseerd worden, en (4) om te weten in hoeverre het generiek doelsysteem de consumentgedragsfactoren, als gender en consumentvertrouwen (*consumer confidence*), kan verklaren.

Het literatuur onderzoek in Hoofdstuk 2 laat zien dat de verschillende doelen van consumenten hiërarchisch in het mentale systeem geordend worden. Het hiërarchische interview (*laddering interview*) is de meest geschikte methode om verschillende hiërarchische doelen van consumenten na te gaan. In dit onderzoek wordt een hiërarchische interviewprocedure getoetst om de generieke doelen van consumenten na te gaan. Het schema daarvan is te vinden in illustratie 4.3. De kern van deze procedure is een hypothetische situatie waarin de respondenten onverwacht geld krijgen (*windfall income*), evenveel als hun maandelijkse salaris. De respondenten worden gevraagd om maximaal drie economische activiteiten te noemen die ze er heel graag mee zouden willen doen. Vervolgens wordt ook gevraagd wat ze ermee zouden willen bereiken. Hiermee is het hiërarchische interview begonnen. Eerst wordt de respondenten gevraagd om drie redenen te noemen waarom het bereiken daarvan belangrijk is. Het verdiepen van elke reden met de vraag "Waarom is het belangrijk?" wordt door twee stappen gedaan.

Het analiseren van die variabelen toont aan dat de procedure alle categorische *action goals*, als **sparen**, **uitgeven**, **investeren**, en **schulden betalen**, kan onderzoeken. Het analiseren van die inhoud vertoont dat er 44 soorten doelen zijn die **sparen** en **uitgeven** evenwichtig vertegenwoordigen. Het analiseren van de dalende reacties laat zien dat de drie hiërarchische vragen al deze *superordinate goals* kunnen nasporen. Vervolgens bewijst het analiseren van het reactiepatroon, dat er relaties zijn tussen opleiding en salaris aan de ene kant, en het hoge aantal reacties aan de andere kant, zoals ik het verwacht had. Dusdanig tonen het analiseren van de inhoud en de reactiepatronen aan dat de *generic goal-laddering procedure* geschikt is voor een ruimer onderzoek naar de systemen van het generieke doel in het besluiten van de consumenten.

De hiërarchische generieke doelstructuur van het consumenten gedrag staat in Hoofdstuk 5. Met behulp van een geïmpliceerde matrix, is er een kaart van hiërarchische doelen samengesteld, zoals te zien is op illustratie 5.1. Daarop kunnen we zien dat de generieke doelen erg georganiseerd zijn, in die zin dat elk doel zowel direct als indirect met andere doelen verbonden is. Desondanks kunnen we de groepering van die verschillende doelen duidelijk zien, bijvoorbeeld de doelen die betrekking hebben op kinderopvoeding, sociaal leven, gezinsharmonie en reservefondsen. Vervolgens zijn er ook zes structurele benodigdheden van het generiek doelsysteem te herkennen, namelijk abstractie (*abstractness*), prestige (*prestige*), centralisatie (*centrality*), instrumentaliteit (*instrumentality*), *equifinality* en *multifinality*. De plaats van een doel in verband met al de doelen in het systeem van generieke doelen, kan aangetoond worden door die structurele benodigdheden. Een abstractie index bijvoorbeeld, kan gebruikt worden om een doel aan te tonen dat in relatie staat met andere doelen, wanneer deze als een voorwaarde fungeert om andere doelen te bereiken, of als een eind bestemming van het te bereiken doel. Gebaseerd op de abstractie index kunnen er drie niveau's van doelen onderscheiden worden, namelijk ondergeschikte (*subordinate*), intermediaire (*intermediate*), en hogere (*super-ordinate*) doelen. De intermediaire en hogere doelen weerspiegelen *current concerns*, *life projects*, *life themes* en consumentenwaarden. Tenslotte rapporteert dit hoofdstuk het resultaat van de nomologische toetsing (*nomological validity*) van het generiek doelsysteem. Met het gebruiken van consumenten vertrouwen als parameter, laat de analyse zien dat zowel het doel als de directe verbinding tussen de doelen (*direct link between goals*) de significante variant van het consumenten vertrouwen uitleggen. Vervolgens verhoogt de verwikkeling van het doel in het model dat de verbindingen bevat de uitgelegde variant significant. Andersom verhoogt de verwikkeling van de doelvariabele in het model dat de verbindingsvariabelen bevat de uitgelegde variant. Gebaseerd op het analiseren van deze data concludeert dit hoofdstuk dat consumenten doelen zeer georganiseerd zijn en

dat deze de variant van gedragsvariabelen van de betreffende consumenten significant kunnen uitleggen. We noemen deze georganiseerde generieke doelen het generieke doelsysteem.

In Hoofdstuk 6 worden de doelen van de handelingen (*action goals*), zoals geïdentificeerd in Hoofdstuk 4 en 5, in twee groepen gezet, namelijk: **sparen** en **uitgeven**. Vervolgens worden de geïmpliceerde matrix en de hiërarchische kaart voor iedere groep samengesteld. Beide kaarten tonen hoge integriteit aan, vooral het spaardoelsysteem. Het is interessant om te weten dat het spaardoelsysteem ook een aantal **uitgeefdoelen** bevat, zelfs ook in het ondergeschikte niveau. De doelen van het sparen integreren met het uitgeefdoelsysteem in het hogere niveau. Daaruit verschijnt er een veronderstelling dat er een functionele samenhang is tussen de doelen van het **sparen** en die van het **uitgeven**, tenminste op bepaalde punten. De statistische analyse wordt hier gebruikt om die veronderstelling te toetsen. Het resultaat ervan toont aan dat de combinatie tussen het spaardoelsysteem en het uitgeefdoelsysteem meer varianten van de afhankelijke variabelen significant kan verklaren dan het spaardoelsysteem en het uitgeefdoelsysteem apart. De veelvoudige hiërarchische terugkeer analyse bewijst dat het uitgeefdoelsysteem *explanatory power* van het spaardoelsysteem op afhankelijke variabele significant kan verhogen. Maar het spaardoelsysteem *explanatory power* van het uitgeefdoelsysteem op afhankelijke variabele niet kan verhogen. Dit zou de stelling, dat sparen een uitgestelde consumptie is, misschien kunnen ondersteunen.

In Hoofdstuk 7 worden de verschillen in economische gedrag tussen vrouwen en mannen behandeld in relatie tot het verschil in het generieke doelsysteem. Alhoewel het verschil tussen die twee geslachten al vaak onderzocht werd, zou dit rapport het eerste onderzoek over het verschil in de intervenierende variabele (*intervening variable*) van economisch gedrag kunnen zijn. Het verschil tussen de geslachten wordt behandeld in verband met de verschillende soorten doelen die genoemd worden, de kenmerken van de hiërarchische kaart, de verbinding onder de doelen, en de benodigdheden van de hiërarchische doel kaart. De chi-kwadraat analyse (*chi-square analysis*) toont een significant verschil aan in verhouding tussen mannen en vrouwen in het noemen van sommige doelen. De vrouwelijke proportie die sociaal motief (bijvoorbeeld: **sociale harmonie** en **behulpzaamheid**), levensstandaard motief (bijvoorbeeld: **probleemloos**, **andere doelen**, en **gezondheidszorg**), financieel motief (bijvoorbeeld: **financiële zelfstandigheid**, **reservefonds**, en **sparen**) noemde, is significant hoger dan de mannen. Andersom is de mannelijke proportie, die voor noodzakelijkheid noemde, significant hoger. De relatieve positie van deze doelen en hun gerelateerde verbindingen wordt versterkt door andere benodigdheden van het generiek doelsysteem, bijvoorbeeld in de centralistische en instrumentale

istische indices. In het algemeen wijst de variabele analyse op de conclusie dat *utilitarian* doelen belangrijker voor mannen zijn, en dat *pro-sociale* en *self-gratification* doelen belangrijker voor vrouwen zijn. Het feit dat alle respondenten mensen zijn met carrière perspectieven, laat zien dat het moderne concept van geslachtsrol die geobserveerde patronen zou kunnen verklaren.

Het toetsen op de informationele inhoud van consumentenvertrouwenindices wordt in Hoofdstuk 8 behandeld. Gebaseerd op de zelf gereguleerde werking van optimisme en pessimisme, veronderstellen we dat het vertrouwensniveau, zoals gemeten door consumentenvertrouwensindices, een cognitief-motiverende inhoud weerspiegelt. Om de hypothese te toetsen, wordt het generieke doelsysteem van een optimistische groep volgens een consumentenvertrouwensscala met het generieke doelsysteem van een pessimistische groep vergeleken. Het resultaat daarvan laat zien dat er significante verschillen zijn in doelsoorten, in de verbinding tussen de doelen en in de benodigdheden van het generieke doelsysteem. In het algemeen bestaat het doelsysteem van de optimistische groep uit **uitgevende** doelen, en het doelsysteem van de pessimistische groep meer uit reserve motieven. Gebaseerd op deze vinding concludeert Hoofdstuk 7 dat de niveau's van consumentenvertrouwendoelen op verschillende manieren activeren. Aldus zou het consumentenvertrouwen verschillende orientaties van economische gedrag kunnen inschatten.

In het algemeen dragen de gerapporteerde uitvindingen in deze dissertatie bij tot literatuur over consumentengedrag, vooral in verband met het consumentengedrag op generiek niveau. Ten eerste vertoont dit onderzoek dat consumentendoelen op generiek niveau met een eenvoudige *generic goal laddering* procedure nagegaan kunnen worden, gebaseerd op een beknopt scenario over onverwachte inkomsten. Deze uitvinding betekent dat die procedure toepasbaar is in verschillende onderzoeken over consumentendoelsystemen met betrekking tot andere krachtbronnen. Ten tweede zijn de onderzochte doelen op generiek besluitsniveau zeer georganiseerd, dat wil zeggen dat doelen op verschillende niveau's met elkaar in verband staan. Deze vinding betekent dat het generieke doelsysteem een volledig raamwerk biedt voor een keuze tussen categorieën van economische activiteiten of de keuze over de combinatie van een aantal economische activiteiten. Ten derde zijn **spaar-** en **uitgeefdoelen** functioneel afhankelijk van elkaar. Deze bevinding ondersteunt de vorige stellingen over het belang van psychologische factoren in het spaargedrag. Dat impliceert dat het van belang is om rekening te houden met factoren die uitgevend consumentengedrag bepalen wanneer men zowel spaargeld als het spaargedrag wil onderzoeken. Ten vierde verschillen generieke doelsystemen van vrouwen en mannen van elkaar op bepaalde belangrijke aspecten. *Utilitarian* waarden en reserve motieven zijn opvallender bij het generieke doelsysteem van mannen, terwijl *pro*

social orientatie en *non-utilitarian* waarden opvallender zijn bij vrouwen. Deze bevinding laat zien dat een vervolg onderzoek zinvol is om het gevolg van de geslachtsrol op consumentengedrag op generiek niveau te bepalen. Tenslotte is er ook een significant verschil te vinden tussen optimistische en pessimistische groepen. Het generieke doelsysteem van de optimistische groep wordt meer beïnvloed door hedonistische en *pro social* orientatie. Andersom wordt het generieke doelsysteem van de pessimistische groep meer beheerst door *utilitarian* drang en schuld motieven. Deze bevinding laat zien dat er een verband is tussen de consumentenvertrouwensindex en het generieke doelsysteem. Dat wil zeggen dat het generieke consumentendoelsysteem als informatieve inhoud van de consumentenvertrouwenindex fungeert. Deze bevinding impliceert dat de gegevens van het consumentenvertrouwensniveau regelmatig gebruikt kunnen worden om het generieke consumentendoelsysteem en de betreffende economische activiteiten in te schatten.

Het laatste hoofdstuk van deze dissertatie discussieert een theoretisch model waarin verondersteld wordt dat het generieke doelsysteem als bemiddelende factor in economisch consumentengedrag fungeert. Bovendien doet dit hoofdstuk een paar voorstellen tot verder onderzoek, bijvoorbeeld naar generieke besluiten over *non monetary* krachtbronnen.



Intisari



Pengambilan keputusan generik (*generic decision making*) merupakan perilaku konsumen yang penting. Pengambilan keputusan generik memiliki dampak yang besar terhadap kesejahteraan konsumen. Salah satu cara untuk memahami pengambilan keputusan generik adalah dengan melihat tujuan-tujuan yang dimiliki konsumen. Penelitian ini bertujuan untuk: (1) untuk mengembangkan prosedur untuk menggali tujuan-tujuan generik konsumen, (2) untuk mengenali organisasi dari tujuan-tujuan generik, (3) untuk mengenali bagaimana tujuan-tujuan yang saling bertentangan secara fungsional diorganisasi dalam sistem mental konsumen, dan (4) untuk mengetahui sejauh mana sistem tujuan generik mampu menerangkan faktor-faktor perilaku konsumen yang sudah lebih dahulu diterima, yakni gender dan keyakinan konsumen (*consumer confidence*).

Kajian pustaka pada Bab 2 menunjukkan bahwa berbagai tujuan konsumen ditata secara hierarkis di dalam sistem mental konsumen. Wawancara berjenjang (*laddering interview*) merupakan metode yang dipandang paling sesuai untuk mengungkap berbagai tujuan-tujuan konsumen yang bersifat hierarkis. Dalam penelitian ini diuji sebuah prosedur wawancara berjenjang untuk menggali tujuan-tujuan generik konsumen. Skema dari prosedur ini ditunjukkan pada Gambar 4.3. Inti dari prosedur ini adalah sebuah situasi hipotetis di mana responden menerima pendapatan takterduga (*windfall income*) dalam jumlah yang setara dengan pendapatan bulanan. Responden diminta untuk menyebutkan paling banyak tiga aktivitas ekonomi yang ingin mereka lakukan dengan uang itu. Selanjutnya, untuk masing-masing aktivitas responden diminta untuk menyebutkan apa yang ingin dicapai. Dari sini prosedur wawancara berjenjang dimulai. Pertama responden diminta untuk menyebutkan paling banyak tiga alasan mengapa mencapai hal tersebut penting. Pendalaman untuk setiap alasan, dalam bentuk pertanyaan “Mengapa ini penting?” dilakukan dalam dua jenjang.

Hasil analisis data menunjukkan bahwa prosedur tersebut mampu menggali seluruh kategori *action goals*, yakni **menabung**, **membelanjakan**, **berinvestasi**, dan **membayar hutang**. Analisis isi menunjukkan adanya 44 macam tujuan yang mewakili tujuan-tujuan **menabung** dan **membelanjakan** secara seimbang. Analisis terhadap penurunan jumlah tanggapan menunjukkan bahwa ketiga *laddering questions* mampu menggali seluruh *superordinate goals*. Selanjutnya, analisis terhadap pola tanggapan menunjukkan adanya pengaruh latar belakang pendidikan dan tingkat penghasilan pada tingginya jumlah tanggapan, sebagaimana yang diharapkan. Dengan demikian analisis isi dan pola tanggapan menunjukkan bahwa *generic goal-laddering procedure* memadai untuk penelitian yang lebih luas tentang sistem-sistem tujuan generik pada pengambilan keputusan konsumen.

Struktur hierarkis dari tujuan-tujuan generik dalam perilaku konsumen dilaporkan pada Bab 5. Dengan menggunakan matriks implikasi, sebuah peta hierarki tujuan dapat disusun sebagaimana terlihat pada gambar 5.1. Sebagaimana terlihat, tujuan-tujuan generik sangat terorganisasi, dalam pengertian bahwa setiap tujuan terhubung secara langsung maupun tidak langsung dengan setiap tujuan yang lain. Sekalipun demikian, pengelompokan berbagai tujuan terlihat dengan jelas, misalnya tujuan-tujuan terkait dengan pendidikan anak, kehidupan sosial, keharmonisan keluarga, dan motif berjaga-jaga. Selanjutnya enam kelengkapan struktural dari sistem tujuan *generic* dapat dikenali, yakni keabstrakan (*abstractness*), prestise (*prestige*), sentralitas (*centrality*), instrumentalitas (*instrumentality*), equifinalitas (*equifinality*), dan multifinalitas (*multifinality*). Kedudukan sebuah tujuan dalam kaitan dengan keseluruhan tujuan dalam sistem tujuan generik dapat ditunjukkan oleh kelengkapan struktural tersebut. Sebagai contoh, indeks keabstrakan dapat dipakai untuk menunjukkan fungsi sebuah tujuan terhadap tujuan-tujuan yang lain, dalam arti apakah tujuan itu berfungsi lebih sebagai sarana untuk mencapai tujuan-tujuan lain, atau sebagai sebuah destinasi (*destination*) dari sebuah pencapaian tujuan. Berdasarkan indeks keabstrakan, tiga tingkatan tujuan dapat dibedakan, yakni tingkat tujuan-tujuan dasar (*sub-ordinate*), menengah (*intermediate*), dan tinggi (*super-ordinate*). Tujuan-tujuan tingkat menengah dan tinggi mencerminkan *current concerns*, *life projects*, *life themes* dan nilai-nilai yang dimiliki konsumen. Terakhir, bab ini melaporkan hasil dari pengujian tentang kesahihan nomologis (*nomological validity*) dari sistem tujuan generik. Dengan menggunakan keyakinan konsumen sebagai tolok ukur, analisis menunjukkan bahwa baik tujuan maupun tautan langsung antar tujuan (*direct link between goals*) menjelaskan secara signifikan variansi pada keyakinan konsumen. Lebih lanjut, pelibatan variabel tautan pada model yang berisi variabel tujuan meningkatkan secara bermakna variansi terterangkan (*explained variance*). Demikian juga sebaliknya, pelibatan variabel tujuan pada model yang

berisi variabel tautan meningkatkan variansi terterangkan Berdasarkan hasil analisis data, bab ini menyimpulkan bahwa tujuan-tujuan konsumen sangat terorganisasi dan dapat secara signifikan menerangkan variansi pada variabel-variabel perilaku konsumen yang terkait. Selanjutnya organisasi tujuan-tujuan generik disebut sebagai sistem tujuan generik.

Selanjutnya pada Bab 6, tujuan-tujuan tindakan (*action goals*) yang ditemukan pada Bab 4 dan Bab 5 dikelompokkan sebagai **menabung** atau **membelanjakan**. Selanjutnya matriks implikasi dan peta hierrarkis untuk masing-masing kelompok tujuan disusun. Kedua peta tujuan menunjukkan tingkat integrasi yang tinggi, terutama untuk sistem tujuan menabung. Yang menarik untuk diperhatikan adalah bahwa sistem tujuan menabung juga meliputi sejumlah tujuan-tujuan **membelanjakan**, bahkan juga pada tingkat dasar. Tujuan-tujuan **menabung** terintegrasi dengan sistem tujuan membelanjakan pada tingkatan yang lebih tinggi. Ini memunculkan dugaan bahwa tujuan-tujuan **menabung** dan **membelanjakan** secara fungsional terkait satu dengan yang lain, stidaknya dalam hal-hal tertentu. Analisis statistika digunakan untuk menguji dugaan ini. Hasilnya menunjukkan bahwa kombinasi antara sistem tujuan menabung dan sistem tujuan membelanjakan dapat lebih banyak menerangkan variansi pada variabel-variabel tergantung daripada masing-masing sistem tujuan tersebut secara terpisah. Analisis regresi ganda berjenjang menunjukkan bahwa sistem tujuan membelanjakan secara signifikan meningkatkan *explanatory power* dari sistem tujuan menabung atas variabel tergantung. Namun, sistem tujuan menabung tidak meningkatkan *explanatory power* sistem tujuan membelanjakan atas variabel tergantung. Ini mungkin mendukung pendapat bahwa tabungan merupakan konsums yang tertunda.

Pada Bab 7 perbedaan-perbedaan antara perempuan dan laki-laki dalam perilaku ekonomi dikaji dalam kaitan dengan perbedaan dalam hal sistem tujuan generik. Sekalipun isu perbedaan antar jenis kelamin sudah sangat sering diteliti, laporan ini mungkin merupakan penelitian pertama yang melihat isu perbedaan itu dalam hal varibel antara (*intervening variable*) dari perilaku ekonomi. Perbedaan antar jenis kelamin dikaji dalam kaitan dengan jenis-jenis tujuan yang disebutkan, ciri-ciri dari peta hierarkis, pertautan antar tujuan, dan kelengkapan dari peta hierarkis tujuan. Analisis kai kuadrat (*chi-square analysis*) menunjukkan perbedaan yang signifikan dalam hal proporsi laki-laki dan perempuan dalam penyebutan beberapa tujuan. Proporsi perempuan yang menyebutkan motif sosial (mis., **harmoni sosial** dan **menjadi orang penolong**), motif standar hidup (mis., **bebas masalah**, **tujuan-tujuan lain**, dan **perawatan kesehatan**), motif keuangan (mis., **kemandirian keuangan**, **siap-siaga**, dan **menabung**) secara signifikan lebih tinggi dibandingkan laki-laki. Sebaliknya, proporsi laki-laki yang menyebutkan tujuan-tujuan untuk memenuhi kebutuhan dasar

keluarga jauh lebih tinggi daripada perempuan. Kesan tentang perbedaan posisi pentingnya tujuan-tujuan tersebut antar laki-laki dan perempuan diperkuat oleh kelengkapan lain dari sistem tujuan generik, misalnya pada indeks sentralitas dan instrumentalitas. Secara umum analisis data mengarah pada kesimpulan bahwa tujuan-tujuan *utilitarian* lebih penting pada laki-laki, sementara tujuan-tujuan pro-sosial dan *self-gratification* lebih penting pada perempuan. Fakta bahwa seluruh responden penelitian ini adalah orang-orang yang memiliki karir menunjukkan bahwa konsep peran jenis modern mungkin menjelaskan perbedaan orientasi tersebut.

Kajian tentang muatan informasi dari indeks kepercayaan konsumen dilaporkan pada Bab 8. Berdasarkan mekanisme regulasi diri atas optimisme dan pesimisme, kami menduga bahwa tingkat keyakinan sebagaimana diukur melalui indeks keyakinan konsumen mencerminkan muatan kognitif-motivasional. Untuk menguji dugaan ini, sistem tujuan generik yang digali dari individu yang optimistik menurut skala keyakinan konsumen dibandingkan dengan sistem tujuan generik kelompok pesimistik. Hasilnya menunjukkan adanya perbedaan-perbedaan yang signifikan dalam hal jenis-jenis tujuan, tautan antar tujuan, dan kelengkapan dari sistem tujuan generik. Secara umum, sistem tujuan kelompok optimistik terdiri atas tujuan-tujuan **membelanjakan**, sementara sistem tujuan kelompok pesimistik lebih cenderung pada motif berjaga-jaga. Berdasarkan temuan ini, Bab 7 menyimpulkan bahwa tingkat keyakinan konsumen secara langsung mempengaruhi tujuan-tujuan konsumen. Dengan demikian keyakinan konsumen dapat digunakan untuk memperkirakan perbedaan orientasi dalam perilaku ekonomi.

Secara umum, temuan-temuan yang dilaporkan dalam disertasi ini memberikan berbagai sumbangan terhadap literatur perilaku konsumen, terutama dalam kaitan dengan perilaku konsumen pada tingkat generik. Pertama, penelitian ini menunjukkan bahwa tujuan-tujuan konsumen yang muncul dalam tingkat generik dapat digali dengan menggunakan prosedur *generic goal ladder* yang sederhana, berdasarkan skenario singkat tentang sebuah pendapatan tak terduga. Temuan ini berarti bahwa prosedur tersebut dapat diterapkan untuk berbagai tujuan penelitian tentang sistem tujuan konsumen dalam kaitan dengan jenis-jenis sumberdaya yang lain. Kedua, tujuan-tujuan yang digali pada tingkat pengambilan keputusan generik sangat terorganisasi, dalam arti bahwa tujuan-tujuan pada berbagai tingkatan saling terkait satu dengan yang lain. Temuan ini bermakna bahwa sistem tujuan generik memberikan kerangka yang utuh untuk pilihan antara kategori-kategori aktivitas ekonomi, atau untuk pengambilan keputusan terkait dengan kombinasi antara sejumlah aktivitas ekonomi. Ketiga, tujuan-tujuan **menabung** dan **membelanjakan** secara fungsional saling tergantung satu dengan yang lain. Temuan ini mendukung pendapat-pendapat

sebelumnya tentang arti penting faktor psikologis di dalam perilaku menabung. Implikasi dari temuan ini adalah bahwa untuk penelitian-penelitian tentang tabungan dan perilaku menabung perlu memperhitungkan faktor-faktor yang menentukan perilaku belanja konsumen. Keempat, sistem tujuan generik laki-laki dan perempuan berbeda dalam sejumlah aspek penting. Nilai-nilai *utilitarian* dan kesiagaan lebih mencolok pada sistem tujuan generik laki-laki, sementara orientasi pro-sosial dan *non-utilitarian* lebih menonjol pada perempuan. Temuan ini menunjukkan bahwa penelitian selanjutnya perlu untuk mengkaji secara menyeluruh tentang dampak peran jenis pada perilaku konsumen di tingkat generik. Terakhir, perbedaan signifikan dalam sistem tujuan generik juga ditemukan antara kelompok yang optimistik dan pesimistik.

Sistem tujuan generik kelompok optimistik lebih diwarnai oleh orientasi hedonistik dan pro-sosial. *The generic goal system of optimistic individuals demonstrate significantly higher inclinations towards hedonic and pro-social orientations.* Sebaliknya, sistem tujuan generik kelompok pesimistik lebih dikuasai oleh dorongan *utilitarian* dan motif-motif melunasi hutang. Temuan ini menunjukkan adanya kaitan antara indeks keyakinan konsumen dengan sistem tujuan generik. Dengan kata lain, sistem tujuan generik konsumen merupakan salah satu muatan informasi dari indeks keyakinan konsumen. Implikasi dari temuan ini adalah bahwa data tingkat keyakinan konsumen yang tersedia secara berkala dapat digunakan sebagai alat pengira-ira sistem tujuan generik konsumen beserta aktivitas ekonomi yang terkait dengannya.

Bagian terakhir dari disertasi ini membahas sebuah model teoretis di mana *generic goal systems* ditempatkan sebagai salah satu faktor yang membentuk perilaku ekonomi. Selain itu bagian ini juga menguraikan beberapa saran untuk penelitian-penelitian selanjutnya, seperti penelitian terkait dengan pengambilan keputusan generik dengan sumber daya selain uang.



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I dedicate this dissertation to my wife, Rita, and my children, Adi and Rania. This dissertation is their achievement, as much as mine.



Curriculum Vitae



Rahmat Hidayat (1968) completed his bachelor degree in Psychology at Gadjah Mada University, Indonesia, in 1993. Prior to joining the Faculty of Psychology, Gadjah Mada University in 1996 as a junior lecturer, he worked for a non-government organization and an international consulting company specializing in human resource management. In 2001 he won a scholarship from the Dutch Government for doing a master's degree, which he took partially, and a scholarship from the British Government. With the support of the latter award in 2002 he completed his master's degree in Economic Psychology at the University of Exeter.

In March 2003 he started his Ph.D. project at Tilburg University under the supervision of W. Fred van Raaij. During his Ph.D. project, he was involved unintentionally in two disaster-related works in his home country, Indonesia. First, he was recruited by the World Health Organization and the Indonesian Ministry of Health to participate in the mental health rapid assessment team, following the 26 December 2004 tsunami that struck the Province of Aceh and several other countries. Based on this experience, he was asked by Gadjah Mada University to lead a mental health response team following the 27 May 2006 earthquake disaster in his home town, Yogyakarta.

Since August 2007 he returned to Gadjah Mada University. His current research is concerned with understanding disaster preparedness of communities living in areas known to have high risks of natural disasters. For example, he is interested on examining the effects of the holistic mode of thinking, and the indigenous concept of life in the willingness to invest on disaster preparedness.



Generic goal systems concerns goals that become active when consumers make decisions regarding the allocation of a resource, such as windfall money. This book examines the content, structure, and determinants of the goal systems. The research shows that generic goals are highly organized. Goals that compete against each other, such as saving versus spending goals, are unified in serving higher level goals, such as attaining happiness and harmony in life. This finding suggests the importance of integrating competing goals in the studies of consumer behaviour at specific contexts. Another finding concerns the determinants of generic goal systems. Significant differences in some features of generic goal systems are identified among male and female respondents, and among the optimistic and pessimistic subjects. This indicates gender and consumer sentiments that are important factors in generic goal systems. Finally, the generic goal laddering procedure as introduced in this dissertation can be applied in wider contexts. Potential applications include understanding generic goals of consumers in a post-disaster reconstruction and upon suffering chronic or terminal illness.